

BID DOCUMENTS COVER SHEET

CONTRACT DOCUMENTS

FOR

***C-4016, Inc. 3, Demo and Abatement of Physical
Science and Biological Science Buildings
and other Structures***

AT

Contra Costa College
2600 Mission Bell Dr., San Pablo, CA 94806

CONTRA COSTA COMMUNITY COLLEGE DISTRICT

Consists of:

VOLUME 1

Architect:

SmithGroup
301 Battery Street, 7th Floor
San Francisco, CA 94111
415.227.0100

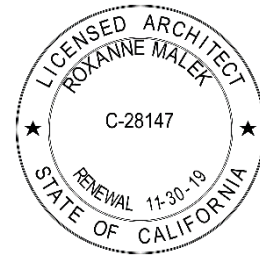
November 6, 2021

SECTION 00007

SEALS PAGE

ARCHITECT:

SMITHGROUPJJR
Roxanne Malek
301 Battery Street, 7th Floor
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(415) 227-0100



CIVIL ENGINEER:

BKF ENGINEERS
Daine Johnson
1646 N. California Blvd, #400,
Walnut Creek, CA 94596
(925) 940-2200



END OF SECTION 00007

SECTION 00010

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DIVISION 03 - CONCRETE

NOT APPLICABLE

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NOT APPLICABLE

DIVISION 05 - METALS

NOT APPLICABLE

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NOT APPLICABLE

DIVISION 07 - THERMAL AND MOISTURE PROTECTION

NOT APPLICABLE

DIVISION 08 - OPENINGS

NOT APPLICABLE

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NOT APPLICABLE

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NOT APPLICABLE

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NOT APPLICABLE

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NOT APPLICABLE

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NOT APPLICABLE

DIVISION 21 - FIRE SUPPRESSION

NOT APPLICABLE

DIVISION 22 - PLUMBING

NOT APPLICABLE

DIVISION 23 - HEATING, VENTILATING, AND AIR-CONDITIONING (HVAC)

NOT APPLICABLE

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NOT APPLICABLE

DIVISION 26 - ELECTRICAL

NOT APPLICABLE

DIVISION 27 - COMMUNICATIONS

NOT APPLICABLE

DIVISION 28 - ELECTRONIC SAFETY AND SECURITY

NOT APPLICABLE

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SECTION 31 23 00 – EXCAVATION AND FILL

SECTION 31 23 19 – DEWATERING

SECTION 31 23 33 – UTILITY TRENCHING AND BACKFILLING

SECTION 31 25 00 – EROSION AND SEDIMENTATION CONTROL

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NOT APPLICABLE

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SECTION 00015
PROJECT DIRECTORY

ARCHITECT:

SMITHGROUP

Johnny Wong
301 Battery Street, 7th Floor
San Francisco, Ca 94111
(415) 227-0100

CIVIL ENGINEER:

BKF ENGINEERS

Daine Johnson
1646 N. California Blvd, #400,
Walnut Creek, CA 94596
(925) 940-2200

OWNER:

Contra Costa Community College District

500 Court Street
Martinez, CA 94553
925-229-1000

FACILITIES PLANNING:

Ines Zildzic, Vice Chancellor, Facilities Planning and Construction
925-229-6873

Kathleen Halaszynski, Director of Construction Program Control
925-229-6846

Tracy Marcial, Energy Manager
925 - 229-6933

PROJECT MANAGER:

Ron Johnson

Critical Solutions, Inc.
1801 Oakland Blvd., Suite 300
Walnut Creek, CA 94596
925-944-5060

CONSTRUCTION MANAGER:

Critical Solutions, Inc.
1801 Oakland Blvd., Suite 300
Walnut Creek, CA 94596
925-944-5060

CCC – BUILDINGS & GROUNDS:

Bruce King, Buildings & Grounds Manager
510 - 215-4853

END OF SECTION 00015

SECTION 00016
CONTRA COSTA COLLEGE CAMPUS MAP



CONTRA COSTA COLLEGE

BUILDINGS, GROUNDS & PARKING
2600 MISSION BELL DRIVE
SAN PABLO, CA 94806



NOTE: ADA pathways are marked in bright red.

BUILDING NAME

- AO Additional Athletic Offices
- AA Applied Arts
- A Art
- AT Automotive Technology
- B Biological Sciences
- C Custodial
- CP Campus Police/Safety Center
- CTC Computer Technology Center
- ELC Early Learning Center
- FH Fireside Hall
- G Gymnasium
- GA Gym Annex (Athletic Office)
- GE General Education
- LLRC Library and Learning Resource Center
- ML Men's Locker Room
- M Music
- PAC/KNOX John and Jean Knox Performing Arts Center
- PS Physical Sciences
- R Receiving/Buildings & Grounds Building
- SAB Student & Administration Building
- SSC Student Services Center: Admissions, Counseling, Financial Aid and Welcome Center
- WL Women's Locker Room

SERVICES

- Admissions & Records
- Assessment Center
- Athletics Office
- Bookstore
- Buildings & Grounds
- Business Office
- Campus Police
- Campus Dining
 - Aqua Terra Grill
 - Pronto
 - Student Cafeteria
- Cashier
- Center for Science Excellence
- Child Care Center
- Counseling
- Custodial Services

ROOM

- SSC-115
- SSC-104
- GA-90
- SAB-170
- R
- SAB-208
- CP
- SAB-130
- SAB-147
- SAB-159
- SSC-115
- PS-109
- ELC
- SSC-108
- C

SERVICES

- Disabled Students Programs & Services
- Economic & Workforce Development
- EOPS/CARE & CalWORKS
- Financial Aid
- Gateway to College
- International Students Office
- Middle College High School
- President's Office
- Scholarships
- Student Life/ASU
- Student Lounge
- Title IX Coordinator
- Tutoring
- Veterans Affairs
- Welcome Center

ROOM

- SSC-109
- SAB-223
- SSC-106
- SSC-102
- AA-219
- SSC-110
- AA-103B
- SAB-205
- SSC-102
- SAB-100
- SAB-120
- SAB-221
- LLRC-121
- SAB-109
- SSC-111



Section 00100
NOTICE INVITING BIDS

**C-4016, Inc. 3, Demo and Abatement of
Physical Science and Biological Science Buildings
and other Structures**

Contra Costa College
2600 Mission Bell Drive, San Pablo, CA 94806

NOTICE IS HEREBY GIVEN that the Governing Board of the Contra Costa Community College District (District), Martinez, California, will receive sealed bid proposals for the furnishing of all labor, materials, equipment, transportation and services for the construction of the project entitled **C-4016, Inc. 3, Demo and Abatement of Physical Science and Biological Science Buildings and other Structures.**

Construction Cost Estimate (Range): \$1,800,000. to \$2,100,000.

License Required: California B - General Building; or California A - General Engineering.

Scope:

In general, the Work consists of the following, but not limited to: installation of temporary facilities, safety signage, wayfinding signage, project temporary fencing, and lighting; storm water pollution prevention; abatement of hazardous materials; demolition and removal of buildings, structures, foundations, hardscape, landscape and a foundation for a pedestrian bridge, above ground and below ground utilities; re-grading; hydroseeding and all related work.

The District does not provide hardcopies of bid documents or reimburse cost of printing, delivery, or any expenses related to the bidding process.

For information directly from the Contra Costa Community College District, you may log in to the District Website: <https://webapps.4cd.edu/apps/purchasingviewbids/default.aspx>. Project documents available include, but are not limited to plans, specifications, addenda, bidders lists, bid results, etc., and can be viewed on this District webpage.

This project is subject to the terms and conditions of a Project Stabilization Agreement (PSA) executed between the Contra Costa Community College District and the Contra Costa County Building & Construction Trades Council ("Council") and its affiliated local signatory unions.

All questions related to this project must be in writing and are directed to:

Mr. Ben Cayabyab, Contracts Manager
Contra Costa Community College District
500 Court St., Martinez, CA 94553
Email: bcayabyab@4cd.edu
Facsimile: 925-370-7512

Each bid shall be made on the BID PROPOSAL FORM (SECTION 00300), which is included in the Bid Documents and when submitted, shall be accompanied by a Bid Bond or Certified Cashier's Check in the amount of 10% of bid (made payable to the Contra Costa Community College District). The District reserves

the right to forfeit Bid Bond submitted for failure of the successful bidder to secure Payment and Performance Bonds.

IMPORTANT INFORMATION:

MANDATORY Pre-Bid Meeting and Job Walk: **November 16, 2021, at 11:00 AM**
Building and Grounds Department – Conference Room
CONTRA COSTA COLLEGE (see map – Section 00016)
2600 Mission Bell Dr.
San Pablo, CA 94806

Last Date and Time for

Bidder’s Requests for Information:

December 6, 2021

Last Day to issue Addendum:

December 10, 2021

BIDS DUE no later than:

December 16, 2021, at 2:00 PM

Bids Must Be Received at:

CONTRA COSTA COMMUNITY COLLEGE DISTRICT (Lobby)
500 Court St.
Martinez, CA 94553
Attn: Ben Cayabyab – Contracts Manager (CCCCD)

Bids must be received by the District prior to the time and by the date noted above. Bids that are not received by the District prior to the time and by the date noted above will not be accepted, and will be returned to the Bidder, unopened.

The successful bidder will be required to furnish a labor and material bond in an amount equal to one hundred percent (100%) of the contract price and a faithful performance bond in an amount equal to one hundred percent (100%) of the contract price, said bonds to be secured from a surety company acceptable to the Contra Costa Community College District and authorized to execute such surety in the State of California.

This project is a public works project and is subject to prevailing wage rate laws. A copy of the prevailing rates of wages is on file with the Contracts & Purchasing Office of the Contra Costa Community College District. Said rates of wages shall be included in the contract for the work by this reference.

Attention is directed to Section 4100 through 4113 of the Public Contract Code concerning Subcontractors, with emphasis on Section 4104, known as the “Subletting and Subcontracting Fair Practices Act, effective July 1, 2014.

Attention is directed to Labor Code Section 1725.5 regarding Department of Industrial Relations (DIR) contractor registration process including registration criteria and implementation of DIR registration requirements. Labor Code Section 1771.7 establishes contractor’s obligation to submit Certified Pay Roll (CPR) to the Department of Labor and Standards Enforcement (DLSE) and public works monitoring and enforcement. Labor Code Section 1773.3 requires the District to submit a PWC-100 to DIR for all public works contract awarded effective January 1, 2015.

Attention is directed to Section 00600, Construction Agreement, Article 5, and Section 00700, General Conditions, Article 8.4.1, regarding liquidated damages. Liquidated Damages shall be set for **\$1,000 Dollars** for each calendar day the work is delayed beyond the Contract Substantial Completion date. The Governing Board of the Contra Costa Community College District reserves the right to reject any and all bids and/or waive any informality or irregularity in any bid received. No bidder may withdraw their Bid for a period of ninety (90) days after the date set for opening thereof.

END OF SECTION 00100

SECTION 00200
INSTRUCTIONS TO BIDDERS

1.1 ISSUING OF DOCUMENTS

Bidding Documents may be examined on the District's Open Solicitations web page, <https://webapps.4cd.edu/apps/purchasingviewbids/default.aspx>, and at the Contra Costa Community College District, 500 Court Street, Martinez, CA 94553, by appointment only: Georgette Stewart, Facilities Department, phone (925) 229-6847.

1.2 QUALIFICATIONS OF BIDDERS

- A. Bidders may be required to furnish evidence satisfactory to the District and the Architect that he has sufficient means and has had sufficient experience in the class of work called for to enable him to complete the Contract in a satisfactory manner.
- B. Bidders shall be Contractors properly licensed in accordance with the laws of the State of California.
- C. The successful Bidder shall furnish satisfactory Certificates of Insurance coverage as specified in the Contract Documents.

1.3 RECEIPT AND OPENING OF BIDS

- A. Contra Costa Community College District hereinafter referred to as the District, will receive Bids at the same time and place specified in the Notice inviting Bids.
- B. Complete the Bid Form included in the Project Manual.
- C. The envelopes containing the Bids shall be sealed, addressed to the District, and designated as "***C-4016, Inc. 3, Demo and Abatement of Physical Science and Biological Science Buildings and other Structures, Contra Costa Community College District***". The envelope shall contain the name and address of the Bidder
- D. Bids that are mailed shall have the previously described envelope placed inside an envelope addressed to: **CONTRA COSTA COMMUNITY COLLEGE DISTRICT, 500 Court Street, Martinez, CA 94553, ATTENTION: Ben Cayabyab, Contracts Manager**. Bids should be mailed in time to be received prior to the time set forth in the Advertisement for Bids.
- E. Bids which are conditional (or which make alterations, omissions, or reservations to the terms of the Bidding Documents) may be rejected as non-responsive.
- F. All monetary figures are required, both in writing and in numerals. In event of conflict between written quotations and numerical quotations, written quotations shall govern.
- G. Type or print all bid data legibly in ink except signatures which shall be in script. Mistakes may be crossed out and corrections inserted, if each is initialed in ink by signer of Bid.
- H. Bidder's business address and signature shall be on the Bid. A Bid by a partnership shall furnish the full names of partners and be signed in the partnership name by one member of the partnership, or by authorized representative, followed by the signature and designation of the person signing. Bids by corporations, with corporate seal affixed, shall be signed with the legal name of the corporation followed by the name of the state of incorporation and by the signature and designation of the person authorized to bind it to the matter. The name of each person signing shall also be typed or printed below the respective signatures. When required by the District,

satisfactory evidence of authority of the office signing on behalf of the corporation shall be furnished.

- I. No Bids will be received after the date and time set forth in the Notice Inviting Bids.

1.4 BID SECURITY

- A. Submit with the Bid a Bid Security in the amount of 10 percent (10%) of the Bid.
- B. The District reserves the right to forfeit the Bid Bond submitted for failure of the successful bidder to secure Payment & Performance Bonds.

1.5 SURETY BONDS

- A. The successful Bidder shall furnish a Labor and Material Payment Bond in the amount equal to one hundred percent (100%) of the Contract Price and a faithful Performance Bond in the amount equal to 100 percent (100%) of the Contract Price as security for the successful performance of the work and payment of persons performing labor and furnishing materials. The Bonds shall be executed by a surety company or companies acceptable to the District and authorized to execute such in the State in which the Project is located and shall be furnished within 10 days after Notice of Acceptance of said Bid. Surety shall be made in favor of the District and shall cover the guarantee periods as well as the construction period.

1.6 WITHDRAWAL OR REVISIONS OF BID

- A. This Bid may be withdrawn or revised prior to the scheduled time for receipt. Bids not withdrawn prior to the scheduled time for receipt may not be withdrawn for a period of 90 days.

1.7 BID PROTESTS

- A. Inquiries or questions based on alleged patent ambiguity of the plans, specifications or estimate must be communicated as a bidder inquiry prior to bid opening. Any such inquiries or questions, submitted after bid opening, will not be treated as a bid protest.
- B. Bidder may file a protest with the District against the Bid of other Bidder or Bidders ("Bid Protest") subject to the provisions of this Article. The procedures and time limits set forth in this Article are mandatory and are a Bidder's sole and exclusive remedy in protesting other Bidders' bids. Failure to comply with these procedures shall constitute a waiver of any right to pursue a Bid Protest, or to contest the District's award of the contract for the work that is the subject of the Bid, in any legal proceeding before any authority with jurisdiction.
- C. Bid Protests and Responses shall be governed by the following time limitations:
 1. Bidder must deliver any Bid Protest to the District in writing before 2:00PM, five (5) working days after the date of bid opening. The District will reject any Bid Protest not received by the District by this deadline. Bidder must concurrently deliver a copy of its Bid Protest to all Bidders against whose Bids the Bid Protest is directed. The Bidder must include with its Bid Protest written proof to the District's satisfaction that Bidder has delivered a copy of its Bid Protest to the other Bidder whose bid is the subject of the Bid Protest.
 2. A Bidder whose Bid is the subject of a Bid Protest must deliver its written response, if any, ("Response") to the District, before 2:00PM, five (5) working days after the date of bid opening. The District will reject any Response not received by the District by this deadline.
- D. Delivery of Bid Protest or Response:

1. Bidder may deliver a Bid Protest to the District by personal delivery or electronic transmission such as by facsimile. Bidder is solely responsible for ensuring that the District receives any Bid Protest or Response by the deadlines set forth herein.
 2. The District will not consider Bid Protests or Responses by telephone conversation or any other non-written communication.
 3. Bidder shall submit any Bid Protest or Response to: Amy Sterry, Director of Purchasing and Contract Services, Contra Costa Community College District, 500 Court Street, Martinez, CA 94553, Facsimile: 925-370-7512.
- E. Content of Bid Protest:
1. A Bid Protest must state the basis for the protest and provide supporting evidence.
 2. A Bid Protest must refer to the specific portion of the Bid that forms the basis of the protest.
 3. A Bid Protest must include the name, address, and telephone number of the person representing the protesting Bidder.
 4. A Bid Protest must be clearly identified as a Bid Protest.

1.8 AWARD AND REJECTION OF BIDS

- A. In awarding or rejecting Bids, the District reserves the following rights:
1. Identification of successful Bidder will not be determined at time of opening Bids.
 2. To obtain opinion of counsel on legality and sufficiency of bids.
 3. To reject all Bids, to re-bid, or waive irregularities or informalities in a Bid, and to accept or reject alternates.
 4. Request proof that the successful Bidder can provide performance and payment bonds as required.

1.9 EXAMINE DOCUMENTS AND VISIT SITE

- A. Before submitting a Bid, the Bidder shall examine the Bidding Documents, visit the site of the work, attend the required site visit arranged by the District and obtain Certification of Attendance signed by the District, ascertain existing conditions and limitations, including those of labor, and include in the Bid a sum to cover the cost of all items described in the Contract Documents.
- B. No consideration will be granted for alleged misunderstanding of the materials to be furnished or work to be done. The tender of a Bid carries with it the agreement to terms and conditions referred to in the Contract Documents.

1.10 DISCREPANCIES, AMBIGUITIES, OR CONFLICTS

- A. If the Bidder is in doubt as to the true meaning of any part of the Contract Documents; finds discrepancies, errors or omissions therein; or finds variances in any of the Contract Documents with applicable rules, regulations, ordinances and/or laws, a written request for an interpretation or correction thereof must be submitted to the District's Contract Manager. Bidders are solely responsible for submitting to District's Contract Manager such request. Ambiguities or inconsistencies arising as a result of separation of sections or portions of the drawings or specifications by or for subcontractor bidding shall not relieve the Contractor for providing the complete Work without increase to or adjustment in the Contract Price or the Time for performance. Interpretations or corrections of the Contract Documents will be by written addendum issued by the Architect. No person is authorized to render an oral interpretation or

correction of any portion of the Contract Documents to any Bidder, and no Bidder is authorized to rely on any such oral interpretation or correction. Failure to request interpretation or clarification of any portion of the Contract Documents pursuant to the foregoing is a waiver of any discrepancy, defect or conflict therein.

1.11 ADDENDA

- A. Cost for work included in any Addenda issued during the time of bidding shall be included in the Bid, and will become a part of the Contract. List Addenda received as indicated on the Bid Form.

1.12 FORM OF AGREEMENT

- A. The form of agreement to be used for the Contract is provided by the District and is included in the Project Manual.

1.13 AWARD OF CONTRACT

- A. The District will be allowed a period of ninety (90) days after Bid Opening Date for evaluating the Bids.
- B. Bidders of record will be notified of the results of the District's evaluation of bids and Award of Contract, if any.
- C. The contractor shall begin work within ten (10) calendar days of receipt of Notice to Proceed.

END OF SECTION 00200

SECTION 00210

INFORMATION AVAILABLE TO BIDDERS

PART 1 - REPORT AND INFORMATION

- 1.1** Existence of reports, record drawings, and utility surveys: Contra Costa Community College District, its consultants, and prior contractors may have collected documents providing a general description of the site and conditions of the work. These documents may consist of geotechnical reports for and around the site, record drawings, utility drawings, and information regarding underground utilities. These reports, documents and other information are not part of the Contract Documents and do not show new work to be constructed, rather, they show existing conditions that Contractor may have to address as part of its construction planning.
- 1.2** Available Documentation: The following existing documentation is available for review through District Website for this project:
- A. Campus Utilities Maps, and Topographic Surveys, issued 9/24/2018.
 - B. Geotechnical Engineering Investigation Report C-4016 New Allied Science Building, Contra Costa College, by Kleinfelder, dated October 17, 2017
 - C. Geologic and Seismic Hazards Assessment Report C-4016 New Science Building, Contra Costa College, by Kleinfelder, dated October 20, 2017
 - D. Pre-Demolition PCB Survey Report, prepared by Forensic Analytical Consulting Services, dated July 30, 2021
 - E. AS-BUILT DRAWINGS (FOR REFERENCE)
 - 1. Architectural Barrier Removal Drawings, 1995 (For Bridge Removal)
 - 2. Natural Sciences (Phys. Sci.) Bldg. Addition & Remodel. 1973
 - 3. Science (Biological) Building, as-built drawings 12-21-1959
 - 4. C-633 Seismic Upgrade - Project Record Drawings, 3/10/2015
 - 5. Hazardous Chemical Storage - Site Plan Electrical E1
 - 6. Hazardous Chemical Storage Unit, 1991 to 1993
 - 7. Physical Sciences Building Roof Replacement, As-Built, 1/17/2015
 - 8. 201124 Marked-up Fire Alarm Drawing (Sheet 6) (Mike Reed)
- 1.3** Contractor shall acknowledge and accept that the documents are not a part of the Contract Documents and are made available to bidders for reference only. The District and its representatives are not responsible for any and all discrepancies between the documents and the existing and actual as-built conditions, and do not guarantee the accuracy of the documents.
- 1.4** The District and Architect assume no responsibility for the completeness or accuracy of the documents or the records compiled there from and the interpretations made from the documents. There is no express or implied guarantee that the conditions indicated in the documents are representative of those existing throughout the building and/or site Conditions differing substantially from those indicated may be encountered.

END OF SECTION 00210

**SECTION 00300
BID PROPOSAL FORM**

PROJECT NUMBER / NAME: C-4016, Inc. 3, Demo and Abatement of Physical Science and Biological Science Buildings and other Structures

CAMPUS / LOCATION: Contra Costa College, 2600 Mission Bell Drive, San Pablo, CA. 94806

DISTRICT: CONTRA COSTA COMMUNITY COLLEGE DISTRICT
500 Court St, Martinez, CA 94553

Herein Referred to as "District"

1. INTRODUCTION

- A. The Bidder proposes to perform the Work for the Contract Sum and within the proposed Contract Time, based upon an examination of the site and the Bid and Contract Documents.
- B. The Bidder certifies this Bid is submitted in good faith.
- C. The Bidder agrees that the Contract Sum and other proposed terms will be considered in evaluating Bids and may be negotiated and adjusted before awarding of Contract.
- D. The signed copy of the Certification of the Visit to the Site shall be attached to the Bid Form Submittal.
- E. A fully executed Statement of Bidder's Qualifications signed by an authorized officer of the Bidder submitting the Bid shall be attached to the Bid Form.
- F. A fully executed Non-Collusion Affidavit signed by an authorized officer of the Bidder submitting Bid shall be attached to the Bid Form.
- G. **The District shall award the contract to the lowest responsive and responsible Bidder. The evaluation of the low bid shall be based on the total of Item 2.A Base Bid, 2.B Unit Prices, and all listed Add Alternates 3.1 through 3.3.**
- H. The District reserves the right to delete any or all Add Alternates, if any, through change orders within **45 calendar days** after the Award of Contract. If deleted by the District, the deleted dollar amount shall be the amount listed for the specific Add Alternate. The Contract Time will remain the same regardless if any Add Alternate is deleted.

2. CONTRACT SUM

A. BASE BID

For labor, materials, bonds, fixtures, equipment, tools, transportation, services, sales taxes, overhead and profit, and other costs necessary to complete the general construction in accordance with the Contract Documents, for a stipulated Contract Sum in the amount of:

Dollars (\$ _____)

B. UNIT PRICES

When estimated quantities as shown in Section 02 82 00 and Section 02 83 00 Appendix 1: Pre-Demolition Survey Report, are exceeded, the Contractor will be compensated per the unit prices listed below. Contractor shall honor the unit price even when the quantities go beyond what is shown below. Should these unit costs not be required a deductive change order will be issued.

Unit prices include labor, materials, bonds, fixtures, equipment, tools, transportation, services, sales taxes, overhead and profit, and other costs necessary to complete the general construction in accordance with the Contract Documents, for a stipulated Contract Sum in the amount of:

1. Unit Price #1: vinyl flooring & mastic

_____ **Qty 4,000 SQ FT x** \$ _____
.....SUBTOTAL ...\$ _____

2. Unit Price #2: wallboard / joint compound / texture

_____ **Qty 9,000 SQ FT x** \$ _____
.....SUBTOTAL ...\$ _____

3. Unit Price #3: pipe and fitting insulation

_____ **Qty 200 LF x** \$ _____
.....SUBTOTAL ...\$ _____

4. Unit Price #4: HVAC mastic

_____ **Qty 100 LF x** \$ _____
.....SUBTOTAL ...\$ _____

5. Unit Price #5: exterior wall sealant / expansion joint

_____ **Qty 100 LF x** \$ _____
.....SUBTOTAL ...\$ _____

6. Unit Price #6: window caulking

_____ **Qty 300 LF x** \$ _____
.....SUBTOTAL ...\$ _____

7. Unit Price #7: exterior caulking

Qty 600 LF x \$ _____
.....SUBTOTAL ...\$ _____

3. ADD ALTERNATES

1. HAZARDOUS CHEMICAL STORAGE

_____ Dollars (\$ _____)

2. CHILLER UNITS PAD

_____ Dollars (\$ _____)

3. BOILER ROOM BUILDING

_____ Dollars (\$ _____)

4. COMPLETION TIME

A. For establishing the Date of Final Completion, the contract time for the Base Bid shall be as indicated in Section 00600, Construction Agreement. This time may be subject to modification to facilitate the work, as mutually agreed upon at a later date.

B. The Bidder certifies that the Bid is based on the Contract Time for completion as stated in Section 00600, Construction Agreement. Bidder further certifies that the Base Bid amount is sufficient to cover all labor, materials, central office and construction site overhead, profit, and all other costs related to the completion of the Project for the entire Project construction time for both the General Contractor and all Subcontractors, as stated above in paragraphs 2 and 3.

5. ADDENDA

A. The Bidder acknowledges receipt of the following Addenda, and certifies the Bid has provided for all modifications and considerations required therein.

None []

Addendum No.: _____ dated _____

Addendum No.: _____ dated _____

Addendum No.: _____ dated _____

Addendum No.: _____ dated _____

B. List of Additional Addenda Attached: Yes [] No. [].

6. DESIGNATION OF SUBCONTRACTORS

- A. The Bidder has set forth a complete list indicating the type of work, name, and business address of each Subcontractor who will perform work in excess of one-half of one percent of the Contract Sum.
- B. Any portion of the work in excess of the specified amount having no designated Subcontractor shall be performed by the Bidder.
- C. Substitution of listed Subcontractors will not be permitted unless approved in advance by the District.
- D. Prior to signing the Contract, the District reserves the right to reject any listed Subcontractor.

	Type of Work	Subcontractor's Name	Business Address/Phone	CSLB License # and DIR Registration #
1				
2				
3				

- E. Complete list of Subcontractors is attached: Yes [] No []
- F. Continuation list of Subcontractors is attached: Yes [] No []

7. ACCEPTANCE AND AWARD

- A. The District reserves the right to reject this Bid and to negotiate changes before or after execution of the Contract. This Bid shall remain open and shall not be withdrawn for a period of 90 days after Bid Opening date.
- B. If written notice of acceptance of this Bid is mailed or delivered to the Bidder within 90 days after the date set for the receipt of this Bid, or other time before it is withdrawn, the Bidder will execute and deliver to the District a Contract prepared by District with the required Surety Bonds and Certificates of Insurance, within 10 days after personal delivery or deposit in the mail of the notification of acceptance.

C. Notice of acceptance or request for additional information may be addressed to the Bidder at the address provided.

8. BID SECURITY

A. The required 10 percent (10%) Bid Security for this Bid is attached in the form of:

() Bid Bond Issued By: _____

() Certified or Cashier's Check No. _____

Issued by: _____

9. BIDDER'S BUSINESS INFORMATION

A. **Individual []:** _____

Personal Name: _____

Business Name: _____

Address: _____

_____ Zip Code: _____

Telephone: _____

Fax Number: _____

B. **Partnership []:** _____

Co-partners' Names: _____

Business Name: _____

Address: _____

_____ Zip Code: _____

Telephone: _____

Fax Number: _____

C. **Corporation []:** _____

Firm Name: _____

Address: _____

_____ Zip Code: _____

Telephone: _____

Fax Number: _____

State of Incorporation: _____

President: _____

Secretary: _____

Treasurer: _____

Manager: _____

D. Power of Attorney: Name: _____

Title: _____

E. Contractor License No. _____ State of _____

F. Bidder is submitting this proposal on behalf of a Joint Venture. Names, license numbers, and relevant information are given on a separate attachment:

Yes [] No [].

G. Upon request, furnish appropriate documentation to substantiate and/or support the data given.

10. The undersigned hereby certifies under penalty of perjury under the laws of the State of California that all the information submitted by the Bidder in connection with this Bid and all the representations herein made are true and correct.

Executed this day of _____

CSLB License No. Expiration Date DIR Registration No.

Firm Name

Signature

By (Print or Type Name)

Title

End of Section 00300



Section 00350

NONCOLLUSION AFFIDAVIT
(TO BE EXECUTED BY BIDDER AND SUBMITTED WITH BID)

State of California

County of Contra Costa

_____ , being first duly sworn, deposes and says that he or she is
of _____ , the party making the foregoing bid that the bid is not made
in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation; that
the bid is genuine and not collusive or sham; that the bidder has not directly or indirectly induced or solicited any other bidder
to put in a false or sham bid, and has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or
anyone else to put in a sham bid, or that anyone shall refrain from bidding; that the bidder has not in any manner, directly or
indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the bidder or any other
bidder, or to fix any overhead, profit, or cost element of the bid price, or of that of any other bidder, or to secure any advantage
against the public body awarding the contract of anyone interested in the proposed contract; that all statements contained in
the bid are true; and, further, that the bidder has not, directly or indirectly, submitted his or her bid price or any breakdown
thereof, or the contents thereof, or divulged information or data relative thereto, or paid, and will not pay, any fee to any
corporation, partnership, company association, organization, bid depository, or to any member or agent thereof to effectuate
a collusive or sham bid.

I certify (or declare) under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Date: _____ Signature: _____

State of California
County of Contra Costa

On _____ , before me, _____ , Notary Public , personally appeared

_____ , personally known to me (or proved to me on the basis of
satisfactory evidence) to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me
that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the
instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing is true and correct.

WITNESS my hand and official seal.

Date: _____ Signature: _____

[SEAL]

END OF SECTION 00350

SECTION 00400

STATEMENT OF BIDDER'S QUALIFICATIONS

Contra Costa Community College District (District), in accordance with Public Contract Code Section 20651.5, requires each prospective bidder for a contract, as described under Section 20651, to complete and submit to the District a standardized questionnaire and financial statement in a form specified by the District, including a complete statement of the prospective bidder's financial ability and experience in performing public works. The questionnaire and financial statement shall be verified under oath by the bidder in the manner in which civil pleadings in civil actions are verified. The questionnaire responses of prospective bidders and their financial statements shall not be deemed public records and shall not be open to public inspection. All information requested must be provided and be current as of the date of the Bid.

I, _____ being first duly sworn, depose and say:
(Name)

I am the _____ of _____
(Title) (Company / Entity)

Firm Name: _____ Check One: Corporation
(as it appears on license) Partnership
 Sole Proprietor
 Joint Venture

Contact Person: _____

Address: _____

Phone: _____ Fax: _____

Email: _____ Tax ID No.: _____

If firm is a sole proprietor or partnership:

Owner(s) of Company _____

Contractor's License Number(s): (California State License Board Classification)

For Bidders That Are Corporations:

1a. Date incorporated : _____

1b. Under the laws of what state: _____

1c. Provide all the following information for each person who is either (a) an officer of the corporation (president, vice president, secretary, treasurer), or (b) the owner of at least ten per cent of the corporation's stock.

Name	Position	Years with Company	% Ownership

1d. Identify every construction firm that any person listed above has been associated with (as owner, general partner, limited partner or officer) at any time during the last five years.

NOTE: For this question, "owner" and "partner" refer to ownership of ten per cent or more of the business, or 10 per cent or more of its stock, if the business is a corporation.

Person's Name	Construction Firm	Dates of Person's Participation with Firm

For Bidders That Are Partnerships:

1a. Date of formation: _____

1b. Under the laws of what state: _____

1c. Provide all the following information for each partner who owns 10 per cent or more of the firm.

Name	Position	Years with Partnership	% Ownership

1d. Identify every construction company that any partner has been associated with (as owner, general partner, limited partner or officer) at any time during the last five years.

NOTE: For this question, “owner” and “partner” refer to ownership of ten per cent or more of the business, or ten per cent or more of its stock, if the business is a corporation.

Person’s Name	Construction Company	Dates of Person’s Participation with Company

For Bidders That Are Sole Proprietorships:

- 1a. Date of commencement of business. _____
- 1b. Tax ID number of company owner _____
- 1c. Identify every construction firm that the business owner has been associated with (as owner, general partner, limited partner or officer) at any time during the last five years.

NOTE: For this question, “owner” and “partner” refer to ownership of ten per cent or more of the business, or ten per cent or more of its stock, if the business is a corporation.

Person’s Name	Construction Company	Dates of Person’s Participation with Company

For Bidders That Intend to Make a Bid as Part of a Joint Venture:

- 1a. Date of commencement of joint venture. _____
- 1b. Provide all of the following information for each firm that is a member of the joint venture that expects to bid on one or more projects:

Name of Firm	% Ownership of Joint Venture

For All Bidders

2. Has there been any change in ownership of the firm at any time during the last five years?
NOTE: A corporation whose shares are publicly traded is not required to answer this question.

Yes No

If "yes," explain on a separate signed page (referring to this question).

3. Is the firm a subsidiary, parent, holding company or affiliate of another construction firm?
NOTE: Include information about other firms if one firm owns 50 percent or more of another, or if an owner, partner, or officer of your firm holds a similar position in another firm.

Yes No

If "yes," explain on a separate signed page (referring to this question).

4. Are any corporate officers, partners or owners connected to any other construction firms?
NOTE: Include information about other firms if an owner, partner, or officer of your firm holds a similar position in another firm.

Yes No

If "yes," explain on a separate signed page (referring to this question).

5. **List all California construction license numbers, classifications and expiration dates of the California contractor licenses held by your firm:**

If more space is needed add a separate signed page (referring to this question).

6. If any of your firm's license(s) are held in the name of a corporation or partnership, list below the names of the qualifying individual(s) listed on the CSLB records who meet(s) the experience and examination requirements for each license.

If more space is needed add a separate signed page (referring to this question).

7. Has your firm changed names or license number in the past five (5) years?

Yes No

If "yes," explain on a separate signed page, including the reason for the change, and all former names under which the firm has conducted business.

8. Has any owner, partner or (for corporations) officer of your firm operated another construction firm under any other name in the last five (5) years?

Yes No

If "yes," explain on a separate signed page (referring to this question), including the reason for the change.

9. Have you attached your latest copy of a REVIEWED OR AUDITED financial statement with accompanying notes and supplemental information?

Yes No

NOTE: A financial statement that is not either reviewed or audited is not acceptable. A letter verifying availability of a line of credit may also be attached; however, it will be considered as supplemental information only, and is not a substitute for the required financial statement.

10. Is the attached Financial Statement for the identical organization of the Bidder?
 Yes No
If "no", explain the relationship and financial responsibility of the organization whose financial statement of provided (i.e., parent/subsidiary, etc.)

If more space is needed add a separate signed page (referring to this question).

11. Contractor possesses a VALID AND CURRENT California Contractor's license for the project or projects for which it intends to submit a bid.
 Yes No

12. List the categories of work your firm typically performs with its own forces, and check the adjacent boxes of those categories of work that will be self-performed on this project

<input type="checkbox"/> _____	<input type="checkbox"/> _____
<input type="checkbox"/> _____	<input type="checkbox"/> _____
<input type="checkbox"/> _____	<input type="checkbox"/> _____

13. On a separate signed page (referring to this question), list all construction projects your organization has in progress and for each project listed, state; (i) a general description of the work performed or to be performed by your organization; (ii) the owner's name, name of the owner's representative, the owner's address and telephone number; (iii) the project architect, address and telephone number; (iv) percent presently completed and (v) the scheduled completion date.

14. On a separate signed page (referring to this question), list all construction projects completed by your organization in the past three years, and for each project, state: (i) a general description of the work performed by your organization on the project; (ii) the owner's name, name of the owner's representative, the owner's address and telephone number; (iii) the initial and final contract amount; (iv) the initial and final dates of completion; and (v) whether the project was completed within contract time and contract budget.

15. Has a claim or other demand ever been made against your organization's California Contractors License Bond?
 Yes No
If yes, on a separate signed page (referring to this question), state the following: (i) the name, address and telephone number of each person or entity making claim or demand; (ii) the date of each claim or demand; (iii) the circumstances giving rise to each such claim or demand; and (iv) the disposition of each such claim or demand.

16. Has a complaint ever been filed against your organization's California Contractors License with the California Contractors State License Board (CSLB)?
 Yes No
If yes, on a separate signed page (referring to this question), state the following for each complaint: (i) the name, address and telephone number of each person or entity making the complaint; (ii) the date of each complaint; (iii) the circumstances giving rise to each such complaint; and (iv) the disposition of each such complaint, including without limitation, any disciplinary or other action imposed or taken by the California Contractors State License Board as a result of any such complaint.
17. Have any lawsuits or other proceedings ever been brought against your organization or any of its principals or officers in connection with any construction contract or construction project?
 Yes No
If "yes," on a separate signed page (referring to this question) describe the circumstances, the amount or relief sought and the disposition of each such lawsuit or other proceeding.
18. Has your organization ever filed a lawsuit or initiated other proceedings in connection with any construction contract or construction project?
 Yes No
If "yes," on a separate signed page (referring to this question) describe the circumstances, the amount or relief sought and the disposition of each such lawsuit or other proceeding.
19. Are there any judgments, orders or arbitration awards pending, outstanding or by which your organization or any of its officers or principals are bound by?
 Yes No
If "yes," on a separate signed page (referring to this question) describe each such judgment, order or arbitration award and the present status of the satisfaction or discharge thereof.
20. Has any California State License Board (CSLB) license held by your firm, or its Responsible Managing Employee (RME) or Responsible Managing Officer (RMO) been suspended or revoked within the last five (5) years?
 Yes No
21. Has your organization ever failed to complete a construction contract?
 Yes No
If "yes," on a separate signed page (referring to this question) state the following; (i) describe each such contract; (ii) the owner's name, address and telephone number; (iii) a description of the project; and (iv) the circumstances of the failure to complete.
22. Has your organization ever been declared in default of a construction contract?
 Yes No
If "yes," on a separate signed page (referring to this question) state the following: (i) describe each such contract; (ii) the owner's name, address and telephone number; (iii) a description of the project; and (iv) the circumstances of the declaration of default.
23. Has a claim or other demand ever been asserted against any Bid Bond, Performance Bond or Labor and Material Payment Bond posted by your organization in connection with any construction contract or your submittal of a bid or proposal on a construction contract?
 Yes No

If “yes,” on a separate signed page (referring to this question) state the following: (i) state the name, address and telephone number of each such claimant; (ii) the date of the claim; and (iii) the disposition thereof.

24. At the time of submitting this qualification form, is your firm ineligible to bid on or be awarded a public works contract, or perform as a subcontractor on a public works contract, pursuant to either Labor Code section 1777.1 or Labor Code section 1777.7?

Yes No

25. At any time during the last five (5) years, has your firm, or any of its owners, officers, or partners been convicted of a crime involving the awarding of a contract of a government or Public construction project, or the bidding or performance of a government or Public contract?

Yes No

26. Has your firm or any of its owners, officers, or partners ever been convicted of a crime involving any federal, state, or local law related to bidding, awarding, or performance of any construction contract?

Yes No

27. Has your firm or any of its owners, officers or partners ever been found liable in a civil suit or found guilty in a criminal action for making any false claim or material misrepresentation to any public agency or entity in any way related to any construction contract?

Yes No

28. Is your firm CURRENTLY the debtor in a bankruptcy case?

Yes No

29. In the last twelve (12) months has your firm, or any firm with which any of your company’s owners, officers or partners was associated, been debarred, disqualified, removed or otherwise prevented from bidding on, or completing, any government agency or public works project for any reason?

NOTE: “Associated with” refers to another construction firm in which an owner, partner or officer of your firm held a similar position.

Yes No

If YES, on a separate signed page (referring to this question) state the following: (i) describe each such project; (ii) the owner's name, address and telephone number; (iii) the circumstances and specific reason given for being prevented from bidding on or completing the project.

30. Has your organization ever refused to sign a contract awarded to it?

Yes No

If YES, on a separate signed page (referring to this question) state the following: (i) describe each such contract; (ii) the owner's name, address and telephone number; (iii) a description of the project; and (iv) the circumstances of the refusal to sign the contract.

31. In the last twelve (12) months has your firm been denied an award of a public works contract based on a finding by a public agency that your company was NOT a responsible bidder?

Yes No

If YES, on a separate signed page (referring to this question) state the following: (i) describe each such contract; (ii) the owner's name, address and telephone number; (iii) a description of the project; and (iv) the circumstances of the determination.

32. Contractor has CURRENT workers' compensation insurance policy as required by the Labor Code or is legally self-insured pursuant to Labor Code section 3700 et. seq.
 Yes No
 Contractor is exempt from this requirement, because it has no employees
33. Within the last two (2) years has there ever been a period when your firm had employees but was without Workers' Compensation insurance or state-approved self-insurance?
 Yes No
34. Attach to this statement true and correct copies of the following:
- 34.1 Your organization's California Contractor's License (the copy must clearly and legibly show: (i) the licensee name; (ii) the expiration date; and (iii) the classification(s) of licensure).
- 34.2 The Contractor's License Bond posted by your organization in connection with your organization's California Contractor's License pursuant to California Business & Professions Code 7071.5 and 7071.6 (the copy must clearly and legibly show; (i) the Bond number or other information sufficient for identification; (ii) the name, address and telephone number of the Surety on the Bond; (iii) the signature of the individual executing the Bond on behalf of the Surety and if such individual's authority is conferred by a power of attorney or by such individual's authority is conferred by a power of attorney or by such individual's designation as an attorney in fact on behalf of the Surety, include a clear and legible copy of such power of attorney or attorney in fact designation; (iv) the principal on such Bond; and (v) the expiration date of such Bond).
- 34.3 If your organization's California Contractor's License is issued by virtue of the qualification of a responsible managing employee or responsible managing officer of your organization, the Qualifier's Bond, if required pursuant to California business & Professions Code 7071.9 (the copy must clearly and legibly show; (i) the bond number or other information sufficient for identification; (ii) the name, address and telephone number of the Surety on the Bond; (iii) the signature of the individual executing the Bond on behalf of the Surety and if such individual's authority is conferred by a power of attorney or by such individual's designation as an attorney in fact on behalf of the Surety, include a clear and legible copy of such power of attorney or attorney in fact designation; (iv) the principal on such Bond; and (v) the expiration date of such Bond).

35. Certification

The responses to each and all of the foregoing are complete and accurate; there are no omissions of material fact or information such that would render any of the foregoing false or misleading; there are no misstatements of fact in any of the foregoing.

I, the undersigned, certify and declare that I have read all the foregoing answers to this Section and know their contents. The matters stated in the above answers are true of my own knowledge and belief, except as to those matters stated on information and belief, and as to those matters I believe them to be true. I declare under penalty of perjury under the laws of the State of California, that the foregoing is correct.

Dated: _____

(Printed Name)

(Signature)

NOTARY PUBLIC

=====

ACKNOWLEDGEMENT (By Corporation, Partnership or Individual)

STATE OF CALIFORNIA)
) ss.
COUNTY OF CONTRA COSTA)

On _____, before me, _____, Notary Public,

personally appeared _____, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing is true and correct.

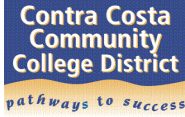
Witness my hand and official seal.

Notary Public

[SEAL]

=====

END OF SECTION 00400



SECTION 00450

CERTIFICATION OF SITE VISIT

The Governing Board of the
Contra Costa Community College District
500 Court Street
Martinez, California 94553

Gentlemen/Ladies:

I visited the C-4016, Inc. 3, Demo/Abatement of PS, BS & Other Structures job site,

on _____ at _____ AM PM (Circle One)

to inspect the proposed work, which would be turned over to me in its present condition, with a representative of the Contra Costa Community College District in order to acquaint myself with the proposed work so that I might fully understand the facilities, difficulties, and restrictions attending the execution of the work under the contract, and acknowledge I had the opportunity to check the Record Drawing as-built drawings and/or previous Contract Documents, site conditions and Bid Documents with the authorized representative of the District.

Owner Representative:

Project Manager – CCCCDC Facilities Date

or

Manager – Buildings & Grounds Date

Bidder:

Name of Firm or Company

Authorized Signatory

Address

Phone Number Fax Number

NOTE: Any bidder who fails to return this CERTIFICATION, fully executed, including signature of company representative AND a Contra Costa Community College District representative, with the proposal form, may have their bid rejected as non-responsive.

END OF SECTION 00450

**PAYMENT BOND
(CALIFORNIA PUBLIC WORK)**

KNOW ALL MEN BY THESE PRESENTS:

THAT WHEREAS, the Contra Costa Community College District (sometimes referred to hereinafter as "Obligee") has awarded to _____ (hereinafter designated as the "Principal" or "Contractor"), an agreement for the work described as follows: _____ (hereinafter referred to as the "Public Work"); and

WHEREAS, said Contractor is required to furnish a bond in connection with said Contract, and pursuant to California Civil Code Section 9550;

NOW, THEREFORE, We, _____, the undersigned Contractor, as Principal; and _____, a corporation organized and existing under the laws of the State of _____, and duly authorized to transact business under the laws of the State of California, as Surety, are held and firmly bound unto the Contra Costa Community College District and to any and all persons, companies, or corporations entitled by law to file stop notices under California Civil Code Section 9100, or any person, company, or corporation entitled to make a claim on this bond, in the sum of _____ Dollars (\$ _____), said sum being not less than one hundred percent (100%) of the total amount payable by said Obligee under the terms of said Contract, for which payment will and truly to be made, we bind ourselves, our heirs, executors and administrators, successors and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH that if said Principal, its heirs, executors, administrators, successors, or assigns, or subcontractor, shall fail to pay any person or persons named in Civil Code Section 9100; or fail to pay for any materials, provisions, or other supplies, used in, upon, for, or about the performance of the work contracted to be done, or for any work or labor thereon of any kind, or for amounts due under the Unemployment Insurance Code, with respect to work or labor thereon of any kind; or shall fail to deduct, withhold, and pay over to the Employment Development Department, any amounts required to be deducted, withheld, and paid over by Unemployment Insurance Code Section 13020 with respect to work and labor thereon of any kind, then said Surety will pay for the same, in an amount not exceeding the amount herein above set forth, and in the event suit is brought upon this bond, also will pay such reasonable attorneys' fees as shall be fixed by the court, awarded and taxed as provided in California Civil Code Sections 9550 et seq.

This bond shall inure to the benefit of any person named in Civil Code Section 9100 giving such person or his/her assigns a right of action in any suit brought upon this bond.

It is further stipulated and agreed that the Surety of this bond shall not be exonerated or released from the obligation of the bond by any change, extension of time for performance, addition, alteration or modification in, to, or of any contract, plans, or specifications, or agreement pertaining or relating to any scheme or work of improvement herein above described; or pertaining or relating to the furnishing of labor, materials, or equipment therefor; nor by any change or modification of any terms of payment or extension of time for payment pertaining or

relating to any scheme or work of improvement herein above described; nor by any rescission or attempted rescission of the contract, agreement or bond; nor by any conditions precedent or subsequent in the bond attempting to limit the right of recovery of claimants otherwise entitled to recover under any such contract or agreement or under the bond; nor by any fraud practiced by any person other than the claimant seeking to recover on the bond; and that this bond be construed most strongly against the Surety and in favor of all persons for whose benefit such bond is given; and under no circumstances shall the Surety be released from liability to those for whose benefit such bond has been given, by reason of any breach of contract between the Obligee and the Contractor or on the part of any obligee named in such bond; that the sole condition of recovery shall be that the claimant is a person described in California Civil Code Sections 9100, and who has not been paid the full amount of his or her claim; and that the Surety does hereby waive notice of any such change, extension of time, addition, alteration or modification herein mentioned.

IN WITNESS WHEREOF, we have hereunto set our hands and seals this _____ day of _____, 20____.

PRINCIPAL/CONTRACTOR:

By: _____

SURETY:

By: _____

Attorney-in-Fact

IMPORTANT: THIS IS A REQUIRED FORM.

Surety companies executing bonds must possess a certificate of authority from the California Insurance Commissioner authorizing them to write surety insurance defined in California Insurance Code Section 105, and if the work or project is financed, in whole or in part, with federal, grant or loan funds, Surety's name must also appear on the Treasury Department's most current list (Circular 570 as amended).

Any claims under this bond may be addressed to:

(Name and Address of Surety)

(Name and Address of agent or representative for service of process in California)

Telephone: _____

Telephone: _____

STATE OF CALIFORNIA)

) ss.

COUNTY OF)

On _____ before me, _____, (insert name and title of the officer)

a Notary Public in and for said State, personally appeared _____, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument as the Attorney-in-Fact of the _____ (Surety) and acknowledged to me that he/she/they subscribed the name of the _____ (Surety) thereto and his own name as Attorney-in-Fact on the executed instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

(SEAL)

Notary Public in and for said State

Commission expires: _____

NOTE: A copy of the power-of-attorney to local representatives of the bonding company must be attached hereto.

**CONTRACT PERFORMANCE BOND
(CALIFORNIA PUBLIC WORK)**

KNOW ALL MEN BY THESE PRESENTS:

THAT WHEREAS, Contra Costa Community College District (sometimes referred to hereinafter as "Obligee") has awarded to _____ (hereinafter designated as the "Principal" or "Contractor"), an agreement for the work described as follows: _____ (hereinafter referred to as the "Public Work"); and

WHEREAS, the work to be performed by the Contractor is more particularly set forth in that certain contract for said Public Work dated _____, (hereinafter referred to as the "Contract"), which Contract is incorporated herein by this reference; and

WHEREAS, the Contractor is required by said Contract to perform the terms thereof and to provide a bond both for the performance and guaranty thereof.

NOW, THEREFORE, we, _____, the undersigned Contractor, as Principal, and _____, a corporation organized and existing under the laws of the State of _____, and duly authorized to transact business under the laws of the State of California, as Surety, are held and firmly bound unto the Contra Costa Community College District in the sum of _____ Dollars (\$ _____), said sum being not less than one hundred percent (100%) of the total amount payable by said Obligee under the terms of said Contract, for which amount well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH THAT, if the bounded Contractor, his or her heirs, executors, administrators, successors or assigns, shall in all things stand to and abide by, and well and truly keep and perform the covenants, conditions, and agreements in said Contract and any alteration thereof made as therein provided, on his or her part, to be kept and performed at the time and in the manner therein specified, and in all respects according to their intent and meaning; and shall faithfully fulfill guarantees of all materials and workmanship; and indemnify, defend and save harmless the Obligee, its officers and agents, as stipulated in said Contract, then this obligation shall become null and void; otherwise it shall be and remain in full force and effect.

The Surety, for value received, hereby stipulates and agrees that it shall not be exonerated or released from the obligation of this bond (either by total exoneration or pro tanto) by any change, extension of time, alteration in or addition to the terms of the contract or to the work to be performed there under or the specifications accompanying the same, nor by any change or modification to any terms of payment or extension of time for any payment pertaining or relating to any scheme of work of improvement under the contract. Surety also stipulates and agrees that it shall not be exonerated or released from the obligation of this bond (either by total exoneration or pro tanto) by any overpayment or underpayment by the Obligee that is based upon estimates

approved by the Architect. The Surety stipulates and agrees that none of the aforementioned changes, modifications, alterations, additions, extension of time or actions shall in any way affect its obligation on this bond, and it does hereby waive notice of any such changes, modifications, alterations, additions or extension of time to the terms of the contract, or to the work, or the specifications as well notice of any other actions that result in the foregoing.

Whenever Principal shall be, and is declared by the Obligee to be, in default under the Contract, the Surety shall promptly either remedy the default, or shall promptly complete the Contract through its agents or independent contractors, subject to acceptance and approval of such agents or independent contractors by Obligee as hereinafter set forth, in accordance with its terms and conditions and to pay and perform all obligations of Principal under the Contract, including, without limitation, all obligations with respect to warranties, guarantees and the payment of liquidated damages; or, at Obligee's sole discretion and election, Surety shall obtain a bid or bids for completing the Contract in accordance with its terms and conditions, and upon determination by Obligee of the lowest responsible bidder, arrange for a contract between such bidder and the Obligee and make available as Work progresses (even though there should be a default or succession of defaults under the contract or contracts of completion arranged under this paragraph) sufficient funds to pay the cost of completion less the "balance of the Contract price" (as hereinafter defined), and to pay and perform all obligations of Principal under the Contract, including, without limitation, all obligations with respect to warranties, guarantees and the payment of liquidated damages. The term "balance of the Contract price," as used in this paragraph, shall mean the total amount payable to Principal by the Obligee under the Contract and any modifications thereto, less the amount previously paid by the Obligee to the Principal, less any withholdings by the Obligee allowed under the Contract.

Surety expressly agrees that the Obligee may reject any agent or contractor which may be proposed by Surety in fulfillment of its obligations in the event of default by the Principal. Unless otherwise agreed by Obligee, in its sole discretion, Surety shall not utilize Principal in completing the Contract nor shall Surety accept a bid from Principal for completion of the work in the event of default by the Principal.

No final settlement between the Obligee and the Contractor shall abridge the right of any beneficiary hereunder, whose claim may be unsatisfied.

The Contractor and Surety shall remain responsible and liable for all patent and latent defects that arise out of or are related to the Contractor's failure and/or inability to properly complete the Public Work as required by the Contract and the Contract Documents. The obligation of the Surety hereunder shall continue so long as any obligation of the Contractor remains.

Contractor and Surety agree that if the Obligee is required to engage the services of an attorney in connection with enforcement of the bond, Contractor and Surety shall pay Obligee's reasonable attorneys' fees incurred, with or without suit, in addition to the above sum.

In the event suit is brought upon this bond by the Obligee and judgment is recovered, the Surety shall pay all costs incurred by the Obligee in such suit, including reasonable attorneys' fees to be fixed by the Court.

IN WITNESS WHEREOF, we have hereunto set our hands and seals this _____ day of _____, 20_____.

PRINCIPAL/CONTRACTOR:

By: _____

SURETY:

By: _____

Attorney-in-Fact

The rate of premium on this bond is _____ per thousand.

The total amount of premium charged: \$ _____ (This must be filled in by a corporate surety).

IMPORTANT: THIS IS A REQUIRED FORM.

Surety companies executing bonds must possess a certificate of authority from the California Insurance Commissioner authorizing them to write surety insurance defined in California Insurance Code Section 105, and if the work or project is financed, in whole or in part, with federal, grant or loan funds, Surety's name must also appear on the Treasury Department's most current list (Circular 570 as amended).

Any claims under this bond may be addressed to:

(Name and Address of Surety)

(Name and Address of agent or representative for service for service of process in California)

Telephone: _____

Telephone: _____

SECTION 00510

NOTICE OF AWARD

DATE: _____

TO: _____

ADDRESS: _____

PROJECT: _____

The Contract Sum of your contract is _____ Dollars,
(\$_____).

You must comply with the following conditions within **ten (10)** calendar days of the date of this Notice of Award, that is, by _____.

1. You must deliver to the District two fully executed counterparts of Section 00600, "Construction Agreement."
2. You must deliver to the District the "Contract Performance Bond," and "Payment Bond," executed by you and your surety, which are included in Section 00500.
3. You must deliver to District the insurance certificates required in Section 00700, for insurance required in Section 00600, Construction Agreement.

Failure to comply with these conditions within the time specified will entitle District to consider your bid abandoned, to annul this Notice of Award, and to declare your Bid Security forfeited. Within **ten (10)** calendar days after you comply with these conditions, the District will return to you one fully signed counterpart of the Construction Agreement.

Contra Costa Community College District

By: _____

Title: _____

END OF DOCUMENT

SECTION 00600

CONSTRUCTION AGREEMENT

CONTRACT NO. _____
(Construction Agreement)

=====
This Agreement shall not be enforceable until ratified and approved by the Contra Costa Community College District’s Governing Board. The estimated board meeting date is January 12, 2022.

(§1.1) Parties: (Public Agency) **CONTRA COSTA COMMUNITY COLLEGE DISTRICT**
500 Court St, Martinez, CA 94553

Contractor _____
Address: _____

(§1.2) Effective Date: See Article 1.4, below.

(§1.3) The Work: **C-4016, Inc. 3, Demo and Abatement of Physical Science and Biological Science Buildings and other Structures**

(§1.4) Completion Time: **200 Calendar Days** from the Notice to Proceed to Substantial Completion, and **35 Calendar Days** from Substantial Completion to Final Completion (Remaining Work).

(§1.5.1) Liquidated Damages, Substantial Completion: **\$1000** per Calendar Day beyond the Contract Substantial Completion Date.

(§1.5.2) Liquidated Damages, Remaining Work/Final Completion: **\$200** per calendar day Remaining Work is delayed beyond the Contract Final Completion Date.

(§1.6) Public Agency’s Agent: **CONTRA COSTA COMMUNITY COLLEGE DISTRICT (“District”)**

(§1.7) Contract Sum: **xxx MILLION, xxx THOUSAND DOLLARS and NO CENTS (\$000,000.00)**

2. SCOPE OF WORK:

In general, the Work consists of the following, but not limited to: installation of temporary facilities, safety signage, wayfinding signage, project temporary fencing, and lighting; storm water pollution prevention; abatement of hazardous materials; demolition and removal of buildings, structures, hardscape, landscape and a foundation for a pedestrian bridge, above ground and below ground utilities; re-grading; hydroseeding and all related work. See Section 00010, Table of Contents, for a list of all the Contract Documents (specifications and drawings) included in this the scope of work, including addendums issued and referenced in the Contractor’s bid form (Section 00300).

3. WORK CONTRACT, CHANGES

- (a) By their signatures below, effective on the above date, these parties promise and agree as set forth in this Agreement, incorporating by these references labor and materials contained in Section 2, Scope of Work.
- (b) Contractor shall, at Contractor's own cost and expense, and in a workmanlike manner, fully and faithfully perform and complete the work; and will furnish all materials, labor, services, equipment, and transportation necessary, convenient and proper in order fairly to perform the requirements of this contract, all strictly in accordance with the Public Agency's- drawings and specifications.
- (c) The work can be changed only with Public Agency's prior written order specifying such change and its cost agreed to by the parties; and the Public Agency shall never have to pay more than specified in Section 1.7 without such an order.

4. TIME: NOTICE TO PROCEED AND ACCEPTANCE

- (a) Contractor shall start this work as directed in the specifications or the Notice to Proceed and shall complete it as specified in Section 1, Completion Time.
- (b) Remaining Work after Substantial Completion. If the Architect or District determines that the work required by the Contract is Substantially Complete during any inspection conducted pursuant to this Agreement or Specification Section 01770, Contract Closeout Procedures, the Contractor shall be notified of that determination and the District shall determine if there is Remaining Work. A list of Remaining Work shall be issued only by the District or the Architect and only after the District has certified Substantial Completion. The District or Architect shall give the Contractor the necessary instructions for correction or completion of the Remaining Work, and the Contractor shall immediately comply with and execute such instructions within the Contract Time. Upon completion of the Remaining Work, another inspection shall be made that shall constitute the Final Inspection, provided the Remaining Work has been completed to the satisfaction of the District. If the remaining work has been completed to the satisfaction of the District, the District shall make the final acceptance and notify the Contractor in writing of this acceptance as of the date of Final Inspection.
- (c) Final Acceptance – Upon due notice from the Contractor of completion of the entire project, the District shall make an inspection. If all construction provided for and contemplated by the contract is found to be completed to the District's satisfaction, then that inspection shall constitute the Final Inspection and the District shall notify the Contractor in writing of final acceptance effective as of the date of the Final Inspection.
- (d) Default for failure to Complete Remaining Work In the event the Contract Time expires before the Remaining Work is completed to the satisfaction of the District, the District may provide notice to the Contractor that the Remaining Work shall be completed by Contractor to the satisfaction of the District within ten consecutive calendar days from the date of such notice. The failure of the Contractor to satisfactorily complete the Remaining Work within the ten days shall entitle to District to declare Contractor in default and thereafter terminate the Contract. The ten-day notice provided under this paragraph shall not be construed as adding any time to the Contract Time and is a time period solely for the purposes of providing notice of default.
- (e) Application for Final Payment. After the Contractor has completed all Remaining Work to the satisfaction of the District and delivered all maintenance and operating instructions, schedules, guarantees, warranties, bonds, certificates of inspection, marked-up record documents and other documents as required by the Contract, and after the District or Architect has indicated that the

work is acceptable, Contractor may make application for final payment following the Payments Procedures for progress payments. The final application for payment shall be accompanied by all documentation called for in the Contract Documents, together with complete and legally effective releases or waivers (satisfactory to the District) of all liens arising out of or filed in connection with the work on the project.

- (f) Final Payment and Acceptance. If the Architect determines that the work has been completed and the Contractor's other obligations under the Contract have been fulfilled, the Architect shall, within ten working days after receipt of the final application for payment, indicate in writing the Architect's recommendation of payment and present the application to District for payment. Thereupon the Architect shall prepare a Certificate of Final Completion. Otherwise, Architect shall return the application to Contractor indicating in writing the reasons for refusing to recommend final payment. Contractor shall make the corrections identified in the Architect's refusal to recommend final payment. Thirty days after presentation to District of the application and accompanying documentation, with the Architect's recommendation and notice of acceptability of the work, the amount recommended by Architect shall be come due and payable by District to Contractor.

5. LIQUIDATED DAMAGES

5.1 LIQUIDATED DAMAGES - SUBSTANTIAL COMPLETION

If the Contractor fails to complete this contract and this Work within the time fixed therefore, allowance being made for contingencies as provided herein, Contractor becomes liable to the Public Agency for all its loss and damage there from; and because, from the nature of the case, it is and will be impracticable and extremely difficult to ascertain and fix the Public Agency's actual damage from any delay in performance hereof, it is agreed that Contractor will pay as liquidated damages to the Public Agency the reasonable sum specified in Section 1, the result of the parties' reasonable endeavor to estimate fair average compensation therefore, for each calendar day's delay in finishing said Work; and if the same be not paid, Public Agency may, in addition to its other remedies, deduct the same from any money due or to become due Contractor under this Contract. If the Public Agency for any cause authorizes or contributes to a delay, suspension of work or extension of time, its duration shall be added to the time allowed for completion, but it shall not be deemed a waiver nor be used to defeat any right of the Agency to damages for non-completion or delay hereunder. Pursuant to Government Code Section 4215, the Contractor shall not be assessed liquidated damages for delay in completion of the work, when such delay was caused by the failure of the Public Agency or the owner of a utility to provide for removal or relocation of existing utility facilities.

5.2 LIQUIDATED DAMAGES-THE REMAINING WORK

The Remaining Work, as such work is determined by the Public Agency or Public Agency's Representative, shall be completed within the Contract Time or any proper extension thereof granted by Public Agency. If the Contractor shall neglect, fail or refuse to complete the Remaining Work within the Contract Time or any proper extension thereof granted by the Public Agency, then the Contractor does hereby agree, as part consideration for the awarding of this Contract, to pay to the Public Agency the amount specified in the Contract, not as a penalty but as liquidated damages for the Remaining Work for each such breach of Contract set forth herein for each and every consecutive calendar day that the Contractor shall be in default after expiration of the Contract Time.

6. INTEGRATED DOCUMENTS

The drawings and specifications and special provisions of the Public Agency's Notice Inviting Bids, and Contractor's accepted bid for this work are hereby incorporated into this Contract; and they are intended to cooperate, so that anything exhibited in the drawings and not mentioned in the specifications or special provisions, or vice versa, is to be executed as if exhibited, mentioned and set forth in both, to the true intent and meaning thereof when taken all together; and differences of opinion concerning these shall be finally determined by the Public Agency.

7. PAYMENT

- (a) For strict and literal fulfillment of these promises and conditions, and full compensation for all this work, the Public Agency shall pay the Contractor the sum specified in Section 1, except that in unit price contracts the payment shall be for finished quantities at unit bid prices.
- (b) On or about the first day of each calendar month, the Contractor shall submit to the Public Agency a verified application for payment, supported by a statement showing all materials actually installed during the preceding month, the labor expended thereon, and the cost thereof; whereupon, after checking, the Public Agency shall issue to Contractor a certificate for the amount determined to be due, minus five (5%) percent thereof pursuant to the Public Agency's General Terms and Conditions, but not until defective work and materials have been removed, replaced and made good.

8. PAYMENTS WITHHELD

- (a) The Public Agency or its agent may withhold any payment, or because of later discovered evidence nullify all or any certificate for payment, to such extent and period of time only as may be necessary to protect the Public Agency from loss because of:
 - (1) Defective work not remedied, or work not completed, or
 - (2) Claims filed or reasonable evidence indicating probable filing, or
 - (3) Failure to properly pay subcontractors or for material or labor, or
 - (4) Reasonable doubt that the work can be completed for the balance then unpaid, or
 - (5) Damage to another contractor, or
 - (6) Damage to the Public Agency, other than damage due to delays.
- (b) The Public Agency shall use reasonable diligence to discover and report to the Contractor, as the work progresses, the materials and labor which are not satisfactory to it, so as to avoid unnecessary trouble or cost to the Contractor in making good any defective work or parts.
- (c) Thirty-five (35) calendar days after Public Agency files its notice of completion of the entire work, it shall issue a certificate to the Contractor and pay the balance of the contract sum after deducting all amounts withheld under this contract, provided the Contractor shows that all claims for labor and materials have been paid, no claims have been presented to the Public Agency based on acts or omissions of the Contractor, and no liens or withhold notices have been filed against the work or site, and provided there are not reasonable indications of defective or missing work or of late-recorded notices of liens or claims against Contractor.

9. INSURANCE

Contractor's Liability Insurance: Before the commencement of the Work, the Contractor shall purchase from and maintain in a company or companies lawfully authorized to do business in California as admitted carriers with a financial rating of at least A status as rated in the most recent edition of Best's Insurance Reports or as amended by the Supplementary General Conditions, if any, such insurance as will protect the Public Agency from claims set forth below, which may arise out of or result from the Contractor's operations under the Contract and for which the Contractor may be legally liable, whether such operations are by the Contractor, by a Subcontractor, by anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable.

- (a) Claims for damages because of bodily injury, sickness, disease, or death of any person District would require indemnification and coverage for employee claim;
- (b) Claims for damages insured by usual personal injury liability coverage, which are sustained by a person as a result of an offense directly or indirectly related to employment of such person by the Contractor or by another person;
- (c) Claims for damages because of injury or destruction of tangible property, including loss of use resulting therefrom, arising from operations under the Contract Documents;
- (d) Claims for damages because of bodily injury, death of a person, or property damage arising out of the ownership, maintenance, or use of a motor vehicle, all mobile equipment, and vehicles moving under their own power and engaged in the Work;
- (e) Claims involving contractual liability applicable to the Contractor's obligations under the Contract Documents, including liability assumed by and the indemnity and defense obligations of the Contractor and the Subcontractors; and
- (f) Claims involving Completed Operations, Independent Contractors' coverage, and Broad Form property damage, without any exclusions for collapse, explosion, demolition, underground coverage, and excavating. (XCU)
- (g) Claims involving sudden or accidental discharge of contaminants or pollutants.

Subcontractor Insurance Requirements: The Contractor shall require its Subcontractors to take out and maintain similar public liability insurance and property damage insurance as required under the above paragraph, titled "Contractor's Liability Insurance, in amounts commensurate with the value of the subcontract. A "claims made" or modified "occurrence" policy shall not satisfy the requirements of the above paragraph, titled "Contractor's Liability Insurance, without prior written approval of the District.

Additional Insured Endorsement Requirement: The Contractor shall name, on any policy of insurance, the District, Architect, Inspector, the State of California, their officers, employees, agents and independent contractors as Additional Insured. Subcontractors shall name the Contractor, the District, Architect, Inspector, the State of California, their officers, employees, agents and independent contractors as Additional Insured.

The Additional Insured Endorsement included on all such insurance policies shall state that coverage is afforded the additional insured with respect to claims arising out of operations performed by or on behalf of the insured. If the Additional Insured have other insurance which is applicable to the loss, such other insurance shall be on an excess or contingent basis. The insurance provided by the Contractor

must be designated in the policy as primary to any insurance obtained by the Public Agency. The amount of the insurer's liability shall not be reduced by the existence of such other insurance.

Workers' Compensation Insurance: During the term of this Contract, the Contractor shall provide workers' compensation insurance for all of the Contractor's employees engaged in Work under this Contract on or at the Site of the Project and, in case any of the Contractor's Work is subcontracted, the Contractor shall require the Subcontractor to provide workers' compensation insurance for all the Subcontractor's employees engaged in Work under the subcontract. Any class of employee or employees not covered by a Subcontractor's insurance shall be covered by the Contractor's insurance. In case any class of employees engaged in Work under this Contract on or at the Site of the Project is not protected under the Workers' Compensation laws, the Contractor shall provide or cause a Subcontractor to provide adequate insurance coverage for the protection of those employees not otherwise protected. The Contractor shall file with the District certificates of insurance as required under Section 00700, Article 11.6, and in compliance with Labor Code § 3700.

Specific Insurance Requirement: Contractor shall take out and maintain and shall require all subcontractors, if any, whether primary or secondary, to take out and maintain:

(a) Workers' Compensation Insurance: \$1,000,000.00; Contractor is aware of and complies with Labor Code Section 3700 and the Worker's Compensation Law.

(b) Comprehensive General Liability Insurance with a combined single limit per occurrence of not less than \$1,000,000.00 and \$2,000,000.00 project specific aggregate, or Commercial General Liability Insurance (including automobile insurance) which provides limits of not less than:

(1)	Per occurrence (combined single limit)	\$1,000,000.00
(2)	Project Specific Aggregate (for this project only)	\$2,000,000.00
(3)	Products and Completed Operations	\$1,000,000.00

(c) Insurance Covering Special Hazards

The following Special hazards shall be covered by riders or riders to above mentioned public liability insurance or property damage insurance policy or policies of insurance, in amounts as follows:

(1)	Automotive and truck where operated in amounts	\$1,000,000.00
(2)	Material Hoist where used in amounts	\$1,000,000.00
(3)	Explosion, Collapse and Underground (XCU coverage)	\$1,000,000.00

(d) In addition, provide Excess Liability Insurance coverage in the amount of Two Million Dollars (\$2,000,000.00).

Builder's Risk/ "All Risk" Insurance/Course-of-Construction Insurance Requirements: The Contractor, during the progress of the Work and until final acceptance of the Work by District upon completion of the entire Contract, shall maintain Builder's Risk, Course of Construction or similar first party property coverage issued on a replacement cost value basis consistent with the total replacement cost of all insurable Work and the Project included within the Contract Documents. Coverage is to insure against all risks of accidental direct physical loss, and must include, by the basic grant of coverage or by endorsement, the perils of vandalism, malicious mischief (both without any limitation regarding vacancy or occupancy), fire, sprinkler leakage, civil authority, sonic boom, earthquake, flood, collapse, wind,

lightning, smoke and riot. The coverage must include debris removal, demolition, increased costs due to enforcement of building ordinance and law in the repair and replacement of damage and undamaged portions of the property, and reasonable costs for the Architect's and engineering services and expenses required as a result of any insured loss upon the Work and Project which is the subject of the Contract Documents, including completed Work and Work in progress, to the full insurable value thereof. Such insurance shall include the District and the Architect as additional named insureds, and any other person with an insurable interest as designated by the District.

The Contractor shall submit to the District for its approval all items deemed to be uninsurable. The risk of the damage to the Work due to the perils covered by the "Builder's Risk/All Risk" Insurance, as well as any other hazard which might result in damage to the Work, is that of the Contractor and the surety, and no claims for such loss or damage shall be recognized by the District nor will such loss or damage excuse the complete and satisfactory performance of the Contract by the Contractor.

10. BONDS

Bond Requirements: Prior to commencing any portion of the Work, the Contractor shall furnish separate payment and performance bonds for its portion of the Work which shall cover 100% faithful performance of and payment of all obligations arising under the Contract Documents and/or guaranteeing the payment in full of all claims for labor performed and materials supplied for the Work. All bonds shall be provided by a corporate surety authorized and admitted to transact business in California as sureties.

To the extent, if any, that the Contract Sum is increased in accordance with the Contract Documents, the Contractor shall, upon request of the Public Agency, cause the amount of the bonds to be increased accordingly and shall promptly deliver satisfactory evidence of such increase to the Public Agency. To the extent available, the bonds shall further provide that no change or alteration of the Contract Documents (including, without limitation, an increase in the Contract Sum, as referred to above), extensions of time, or modifications of the time, terms, or conditions of payment to the Contractor will release the surety. If the Contractor fails to furnish the required bonds, the Public Agency may terminate the Contract for cause.

On signing this contract, Contractor shall deliver to Public Agency for approval good and sufficient bonds with sureties, in amount(s), specified in the specifications or special provisions, guaranteeing faithful performance of this contract and payment for all labor and materials hereunder.

Surety Qualifications: Only bonds executed by admitted Surety insurers as defined in Code of Civil Procedure § 995.120 shall be accepted. Surety must be a California-admitted surety and listed by the U.S. Treasury with a bonding capacity in excess of the Project cost.

Alternate Surety Qualifications: If a California-admitted surety insurer issuing bonds does not meet these requirements, the insurer will be considered qualified if it is in conformance with § 995.660 of the California Code of Civil Procedure and proof of such is provided to the District.

11. FAILURE TO PERFORM

If the Contractor at any time refuses or neglects, without fault of the Public Agency or its agent(s), to supply sufficient materials or workers to complete this agreement and work as provided herein, for a

period of ten days or more after written notice thereof by the Public Agency, the Public Agency may furnish same and deduct the reasonable expenses thereof from the contract price.

12. LAWS APPLY: General

Both parties recognize the applicability of various federal, state and local laws and regulations, especially Chapter 1 of Part 7 of the California Labor Code (beginning with Section 1720, and including Sections 1735, 1777.5, 1777.6, forbidding discrimination) and intend that this agreement complies therewith. The parties specifically stipulate that the relevant penalties and forfeitures provided in the Labor Code, especially in Sections 1775, 1776, and 1813, concerning prevailing wages and hours, shall apply to this agreement as though fully stipulated herein.

13. SUBCONTRACTORS

Public Contract Code Sections 4100-4113 are incorporated herein.

14. WAGE RATES

- (a) Pursuant to Labor Code Section 1773, the Director of the Department of Industrial Relations has ascertained the general prevailing rates of wages per diem, and for holiday and overtime work, in the locality in which this work is to be performed, for each craft, specified in the call for bids for this work and are on file with the Public Agency, and are hereby incorporated herein.
- (b) This schedule of wages is based on a working day of eight (8) hours unless otherwise specified; and the daily rate is the hourly rate multiplied by the number of hours constituting the working day. When less than that number of hours are worked, the daily wage rate is proportionately reduced, but the hourly rate remains as stated.
- (c) The Contractor, and all subcontractors, must pay at least these rates to all persons on this work, including all travel, subsistence, and fringe benefit payments provided for by applicable collective bargaining agreements. All skilled labor not listed above must be paid at least the wage scale established by collective bargaining agreement for such labor in the locality where such work is being performed. If it becomes necessary for the Contractor or any subcontractor to employ any person in a craft, classification or type of work (except executive, supervisory, administrative, clerical or other non-manual workers as such) for which no minimum wage rate is specified, the contractor shall immediately notify the Public Agency which shall promptly determine the prevailing wage rate therefore and furnish the Contractor with the minimum rate based thereon, which shall apply from the time of the initial employment of the person affected and during the continuance of such employment.

15. HOURS OF LABOR

Eight hours of labor in one calendar day constitutes a legal day's work, and no worker employed at any time on this work by the Contractor or by any subcontractor shall be required or permitted to work longer thereon except as provided in Labor Code Sections 1810-1815.

16. APPRENTICES

Properly indentured apprentices may be employed on this work in accordance with Labor Code Sections 1777.5 and 1777.6, forbidding discrimination.

17. PREFERENCE FOR MATERIALS

The Public Agency desires to promote the industries and economy of Contra Costa County, and the Contractor therefore promises to use the products, workers, laborers and mechanics of this County in every case where the price, fitness and quality are at least equal.

18. ASSIGNMENT

This agreement binds the heirs, successors, assigns, and representatives of the Contractor; but Contractor cannot assign it in whole or in part, nor any monies due or to become due under it, without the prior written consent of the Public Agency and the Contractor's surety or sureties, unless they have waived notice of assignment.

19. NO WAIVER BY PUBLIC AGENCY

Inspection of the work and/or materials, or approval of work and/or materials inspected, or statement by any officer, agent or employee of the Public Agency indicating the work or any part thereof complies with the requirements of this contract, or acceptance of the whole or any part of said work and/or materials, or payments therefore, or any combination of these acts, shall not relieve the Contractor of Contractor's obligation to fulfill this contract as prescribed; nor shall the Public Agency be thereby stopped from bringing any action for damages or enforcement arising from the failure to comply with any of the terms and conditions hereof.

20. HOLD HARMLESS AND INDEMNITY

- (a) Contractor promises to and shall hold harmless and indemnify from the liabilities as defined in this section.
- (b) The indemnities benefited and protected by this promise are the Public Agency and its elective and appointive boards, commissions, officers, agents and employees.
- (c) The liabilities protected against are any liability or claim for damage of any kind allegedly suffered, incurred or threatened because of actions defined below, including personal injury, death, property damage, inverse condemnation, or any combination of these, regardless of whether or not such liability, claim or damage was unforeseeable at any time before the Public Agency approved the improvement plan or accepted the improvements as completed, and including the defense of any suit(s) or action(s) at law or equity concerning these.
- (d) The actions causing liability are any act or omission (negligent or non-negligent) in connection with the matters covered by this contract and attributable to the contractor, subcontractor(s), or any officer(s), agent(s), or employee(s) of one or more of them.
- (e) Non-conditions: The promise and agreement in this section is not conditioned or dependent on whether or not any Indemnities has prepared, supplied, or approved any plan(s), drawing(s),

specifications(s) or special provision(s) in connection with this work, has insurance or other indemnification covering any of these matters, or that the alleged damage resulted partly from any negligent or willful misconduct of any Indemnities.

21. EXCAVATION

Contractor shall comply with the provisions of Labor Code Section 6705, if applicable, by submitting to Public Agency a detailed plan showing the design of shoring, bracing, sloping, or other provisions to be made for worker protection from the hazard of caving ground during trench excavation.

22. GOVERNMENT CODE SECTION 10532

Contractor shall be subject to the examination and audit of the Auditor General for a period of three years after final payment under the contract.

23. WARRANTY

- (a) In addition to any other warranties or guaranties in the Contract Documents, the Contractor warrants, except as provided in paragraph (i) of this clause, that work performed under this contract conforms to the contract requirements and is free of any defect in equipment, material, or design furnished, or workmanship performed by the Contractor or any subcontractor or supplier at any tier.
- (b) This warranty shall continue for a period of 1 year from the date of final acceptance of the Work or Phase of Work, unless otherwise provided or extended in the Contract Documents. If the District takes possession of any part of the work before final acceptance, this warranty shall continue for a period of 1 year from the date the District takes possession.
- (c) The Contractor shall remedy at the Contractor's expense any failure to conform, or any defect. In addition, the Contractor shall remedy at the Contractor's expense any damage to District-owned or controlled real or personal property, when that damage is the result of—
 - (1) The Contractor's failure to conform to contract requirements; or
 - (2) Any defect of equipment, material, workmanship, or design furnished.
- (d) The Contractor shall restore any work damaged in fulfilling the terms and conditions of this clause. The Contractor's warranty with respect to work repaired or replaced will run for 1 year or as otherwise provided or extended from the date of repair or replacement.
- (e) The District shall notify the Contractor, in writing, within a reasonable time after the discovery of any failure, defect, or damage.
- (f) If the Contractor fails to remedy any failure, defect, or damage within a reasonable time after receipt of notice, the District shall have the right to replace, repair, or otherwise remedy the failure, defect, or damage at the Contractor's expense.
- (g) With respect to all warranties, express or implied, from subcontractors, manufacturers, or suppliers for work performed and materials furnished under this contract, the Contractor shall—
 - (1) Obtain all warranties that would be given in normal commercial practice;
 - (2) Require all warranties to be executed, in writing, for the benefit of the District, if directed by the District; and

- (3) Enforce all warranties for the benefit of the District, if directed by the District.
- (h) In the event the Contractor's warranty under paragraph (b) of this clause has expired, the District may bring suit at its expense to enforce a subcontractor's, manufacturer's, or supplier's warranty.
 - (i) Unless a defect is caused by the negligence of the Contractor or subcontractor or supplier at any tier, the Contractor shall not be liable for the repair of any defects of material or design furnished by the District nor for the repair of any damage that results from any defect in District-furnished material or design.
 - (j) This warranty shall not limit the District's rights under the Inspection and Acceptance clause of this contract with respect to latent defects, gross mistakes, or fraud.

24. CONSEQUENTIAL DAMAGES

The Contractor and Public Agency waive Claims against each other for consequential damages arising out of or relating to this Contract. This mutual waiver includes:

- (a) Damages incurred by the Public Agency for rental expenses, for losses of use, income, profit, financing, business and reputation, and for loss of management or employee productivity or of the services of such persons; and
- (b) Damages incurred by the Contractor for principal office expenses including the compensation of personnel stationed there, for losses of financing, business and reputation, and for loss of profit except anticipated profit arising directly from the Work.

This mutual waiver is applicable, without limitation, to all consequential damages due to either party's termination. Nothing contained in this subparagraph shall be deemed to preclude an award of liquidated direct damages, when applicable, in accordance with the requirements of the Contract Documents.

25. HAZARDOUS MATERIALS

- (a) If reasonable precautions will be inadequate to prevent foreseeable bodily injury or death to persons resulting from a material or substance, including but not limited to asbestos, lead or polychlorinated biphenyl (PCB), encountered on the site by the Contractor, the Contractor shall, upon recognizing the condition, immediately stop Work in the affected area and report the condition to the Public Agency in writing.
- (b) The Public Agency shall obtain the services of a licensed laboratory to verify the presence or absence of the material or substance reported by the Contractor and, in the event such material or substance is found to be present, to verify that it has been rendered harmless. The Public Agency shall furnish in writing to the Contractor the names and qualifications of persons or entities who are to perform tests verifying the presence or absence of such material or substance or who are to perform the task of removal or safe containment of such material or substance. When the material or substance has been rendered harmless, Work in the affected area shall resume upon written notification from the Public Agency and Contractor. The Contract Time shall be extended appropriately.

26. SAFETY

- (a) **Safety Programs.** In addition to and as required by other Sections of the Contract Documents, the Contractor shall be solely responsible for initiating, maintaining and supervising all safety programs required by applicable law, ordinance, regulation or governmental orders in connection with the performance of the Contract, or otherwise required by the type or nature of the Work. The Contractor's safety program shall include all actions and programs necessary for compliance with California or federally statutorily mandated workplace safety programs, including without limitation, compliance with the California Drug Free Workplace Act of 1990 (California Government Code §§8350 et seq.). Without limiting or relieving the Contractor of its obligations hereunder, the Contractor shall require that its Subcontractors similarly initiate and maintain all appropriate or required safety programs. Prior to commencement of Work, the Contractor shall meet with the Campus Buildings and Grounds Manager, Project Manager, and Construction Manager to review Contractor's safety precautions and implementation of safety programs during the Work.
- (b) **Safety Precautions.** In addition to and as required by other Sections of the Contract Documents, the Contractor shall be solely responsible for initiating and maintaining reasonable precautions for safety of, and shall provide reasonable protection to prevent damage, injury or loss to: (i) employees on the Work and other persons who may be affected thereby; (ii) the Work and materials and equipment to be incorporated therein, whether in storage on or off the site, under care, custody or control of the Contractor or the Contractor's Subcontractors or Sub-subcontractors; and (iii) other property or items at the site of the Work, or adjacent thereto, such as trees, shrubs, lawns, walks, pavements, roadways, structures and utilities not designated for removal, relocation or replacement in the course of construction. The Contractor shall take adequate precautions and measures to protect existing roads, sidewalks, curbs, pavement, utilities, adjoining property and improvements thereon (including without limitation, protection from settlement or loss of lateral support) and to avoid damage thereto. Without adjustment of the Contract Price or the Contract Time, the Contractor shall repair, replace or restore any damage or destruction of the foregoing items as a result of performance or installation of the Work.
- (c) **Safety Signs, Barricades.** In addition to and as required by other Sections of the Contract Documents, the Contractor shall erect and maintain, as required by existing conditions and conditions resulting from performance of the Contract, reasonable safeguards for safety and protection of property and persons, including, without limitation, posting danger signs and other warnings against hazards, promulgating safety regulations and notifying Districts and users of adjacent sites and utilities.
- (d) **Safety Notices.** In addition to and as required by other Sections of the Contract Documents, the Contractor shall give or post all notices required by applicable law and comply with applicable laws, ordinances, rules, regulations and lawful orders of public authorities bearing on safety of persons or property or their protection from damage, injury or loss.

27. PROJECT STABILIZATION AGREEMENT

- (a) **Definitions.** As used in this clause— "Project Stabilization Agreement" (hereinafter "PSA") means the pre-hire collective bargaining agreement between the Contra Costa Community College District and the Contra Costa

Building and Construction Trades Council attached to these Contract Documents which establishes the terms and conditions of employment for the Project.

(b) Contracts.

- (1) The Contractor/Employer shall maintain in a current status, throughout the life of this Contract, the PSA included in these Contract Documents. By accepting the award of this Construction Contract for the Project, whether as Contractor or subcontractor, the Contractor/Employer agrees to be bound by each and every provision of the PSA, and evidence its acceptance prior to the commencement of work by executing the PSA Agreement to be Bound in the form attached to the PSA found in these Contract Documents.
- (2) Subcontracts. At the time that any Contractor/Employer enters into a subcontract with any subcontractor providing for the performance of the construction subcontract, the Contractor/Employer shall provide a copy of the PSA to said subcontractor and shall require the subcontractor, as a part of accepting an award of a construction subcontract, to agree in writing to be bound by each and every provision of the PSA, and agree that it will evidence its acceptance prior to the commencement of work by executing the PSA Agreement to be Bound in the form attached to the PSA found in these Contract Documents.

(c) Reporting.

- (1) PSA Preconstruction Conference. The Contractor/Employer shall, prior to the commencement of work under this Contract, hold a Preconstruction Conference in accordance with PSA Article 5 PRECONSTRUCTION CONFERENCE which shall be attended by a representative from each Contractor/Employer, the Unions, and the District. The Contractor/Employer shall contact the Contra Costa Building and Construction Trades Council at least two (2) weeks prior to scheduling the Preconstruction Conference so that the Unions can be notified of the date, time, and place of the Conference.
 - i. The Contractor/Employer shall lead the Preconstruction Conference and take minutes of the meeting.
 - ii. The Contractor/Employer shall submit written meeting minutes of the Conference in a form preapproved by the District within five (5) working days. The minutes shall include the names and organizations of each person attending the Conference. The minutes shall also include copies of the Agreements to be Bound required by this Contract and the PSA.

(d) Monthly Reporting. During each month in which construction work is performed by the Contractor/Employer or by any subcontractor, from Notice to Proceed through Notice of Completion, report the information required below to the District as a monthly administrative Submittal. These reports shall be submitted with each regularly scheduled payment application, or the application will be returned to the Contractor/Employer for resubmittal with the required reports.

- (1) New Agreements to be Bound resulting from new subcontracts, if any, entered into by each Contractor/Employer.
- (2) Each instance during the reporting period of which a Union is unable to fill a requisition for employees thereby causing the Contractor/Employer to apply Article 8 REFERRAL Clause 8.3, to obtain qualified work persons for the Contract work.
- (3) A summary of efforts during the reporting period to comply with the goals of Article 10 LOCAL HIRE, including a spreadsheet report of the number of hours worked by all journeymen and by all apprentices on site, and the subset of the number of hours worked by journeymen and by apprentices who are residents of Contra Costa County.

(4) A summary of efforts to utilize the Center for Military Recruitment, Assessment and Veterans Employment, in accordance with Article 15 HELMETS TO HARDHATS.

27. SIGNATURES AND ACKNOWLEDGEMENT

Public Agency, By: _____
Amy Sterry, Director of Purchasing and Contracts

Note to Contractor: (1) Execute acknowledgement form below, and (2) if a corporation, affix Corporate Seal.

Contractor hereby also acknowledging awareness of and compliance with Labor Code S1861 concerning Worker's Compensation Law.

Contractor:

By: _____ (CORPORATE SEAL)
(Designate Official Capacity) **NAME**

Print NAME and TITLE

License Number

Federal ID Number

NOTARY PUBLIC

=====

=

State of California)ss. ACKNOWLEDGEMENT (By Corporation, Partnership or Individual)
County of Contra Costa)

The person(s) signing above for Contractor, known to me in individual and business capacity as stated, personally appeared before me today and acknowledged that he/she/they executed it and that the corporation or partnership named above executed it.

Dated: _____

(NOTARIAL SEAL)

END OF SECTION 00600

FIRST AMENDMENT TO THE
PROJECT STABILIZATION AGREEMENT
for the
CONTRA COSTA COMMUNITY COLLEGE DISTRICT

Preamble

This is the First Amendment (this "Amendment") to the Project Stabilization Agreement ("Agreement") for the Contra Costa Community College District entered into as of the 22nd day of October, 2012, by and between the Contra Costa Community College District ("District") together with contractors and/or subcontractors who became or will become signatory to the Agreement by signing the Agreement Exhibit A, the "Agreement to be Bound", and the Contra Costa Building & Construction Trades Council ("Council") and its affiliated local unions that have executed the Agreement (all of whom are referred to collectively as "Unions").

Recitals

WHEREAS the District, the Council, and the Unions desire to amend the Agreement to reflect certain agreed upon changes as set forth below, with the understanding that all other terms, conditions and Recitals in the Agreement remain valid and in effect; and

WHEREAS Article 2, Section 2.4.10 of the Agreement provides that the District and the Contra Costa Building and Construction Trades Council may mutually agree in writing to amend and extend this Agreement at any time.

NOW THEREFORE, in consideration of the mutual promises and covenants herein contained, the District and the Contra Costa Building and Construction Trades Council, and its affiliated local unions that become signatory to this Amendment, together with the contractors and/or subcontractors who became or will become signatory to the Agreement, do mutually agree to amend the Agreement as noted below with all other terms and conditions to remain unchanged and in effect.

Amendment


Article 1 Section 1.6 is hereby amended and revised to state as follows:

"Project" means any District construction project that has a total minimum estimated construction cost of one million dollars (\$1,000,000) or more. The District may, at its discretion, designate other project(s) or contract(s) with a total estimated construction cost of less than one million dollars (\$1,000,000) to be covered by this Agreement if the District believes it is in the best interest of the District to do so. Routine maintenance of District properties are not covered by the scope of this Agreement.

Article 2 is hereby amended to include Section 2.4.11 which states as follows:

2.4.11 Pursuant to Section 2.4.10, this Agreement has been reviewed and considered for extension or renewal, and the District and the Contra Costa Building and Construction Trades Council have agreed that the Agreement shall be extended for a term of five (5) years from the original expiration date of the Agreement which is the 22nd day of October 2017. At the close of the extension term, the Agreement shall be reviewed and considered for further extension or renewal, with modifications, if appropriate. Except as amended herein, the Agreement shall continue in full force and effect in accordance with its terms.

Contra Costa Community College District

BY: 
Fred E. Wood
Chancellor

DATE: 11/2/17


Contra Costa Building and Construction
Trades Council, AFL-CIO

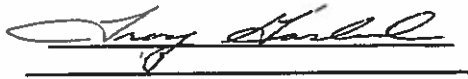
BY: 
Bill Whitney, Chief Executive Officer


DATE: 10/16/2017

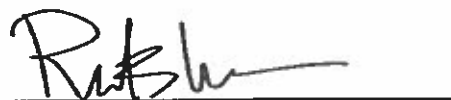
SIGNATURE PAGE
UNIONS


Asbestos Workers Local #16



Boilermakers Local #549


Bricklayers Local #3


Northern California Regional Council of
Carpenters for itself and on behalf of its
affiliated local unions


Sheet Metal Workers Local #104

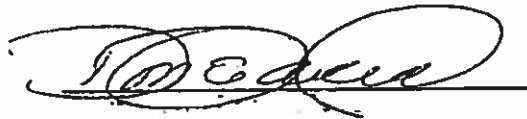

Operating Engineers Local #3

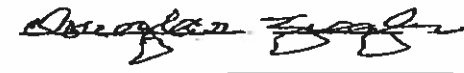

District Council #16, Painters and
Allied Trades for itself and on behalf of
its affiliated local unions


Sprinkler Fitters Local #483

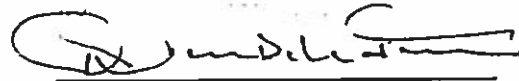

United Association Local #342

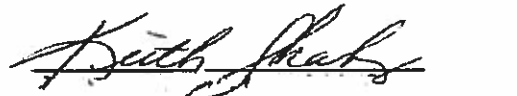

Elevator Constructors Local #8

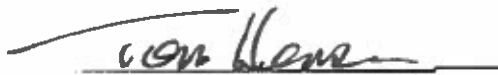

Teamsters Local #315


Roofers Local #81


Iron Workers Local #378


Northern California District Council of
Laborers for itself and on behalf of its
affiliated local unions


Cement Masons Local #300


Electrical Workers Local #302


Plasterers Local #66


United Association Local #159


United Association Local #355

PROJECT STABILIZATION AGREEMENT

for the

CONTRA COSTA COMMUNITY COLLEGE DISTRICT

PREAMBLE

This Project Stabilization Agreement is entered into this 29 day of OCTOBER, 2012 by and between the Contra Costa Community College District (hereinafter, the "District"), together with contractors and/or subcontractors, who shall become signatory to this Agreement by signing the "Agreement To Be Bound" (Exhibit A) (all of whom are referred to herein as "Contractors/Employers"), and the Contra Costa County Building & Construction Trades Council ("Council") and its affiliated local unions that have executed this Agreement (all of whom are referred to collectively as "Unions").

Recitals

WHEREAS, the purpose of this Agreement is to promote efficiency of construction operations during the construction of District Projects and provide for peaceful settlement of labor disputes and grievances without strikes or lockouts, thereby promoting the District's interest and the public's interest in assuring the timely and economical completion of the District's construction Projects; and

WHEREAS, the successful and efficient completion of the District's construction Projects is of the utmost importance to the District and its educational programs and mission; and

WHEREAS, large numbers of workers of various skills will be required in the performance of the construction work, including those to be represented by the Unions affiliated with the Council; and

WHEREAS, it is recognized that District construction Projects require multiple contractors and bargaining units on the job site at the same time over an extended period of time, and that the potential for work disruption is substantial in the absence of a binding commitment to maintain continuity of work; and

WHEREAS, the interests of the general public, the District, the Unions and Contractors/Employers would be best served if the construction work proceeded in an orderly manner without disruption because of strikes, sympathy strikes, work stoppages, picketing, lockouts, slowdowns or other interferences with work; and

WHEREAS, the Contractors/Employers and the Unions desire to mutually establish and stabilize wages, hours and working conditions for the workers employed on District Projects by

the Contractors/Employers and the Unions to the end that a satisfactory, continuous and harmonious relationship will exist among the parties to this Agreement; and

WHEREAS, this Agreement is not intended to replace, interfere, abrogate, diminish or modify existing local or national collective bargaining agreements in effect during the duration of the Program, insofar as a legally binding agreement exists between the Contractor(s)/Employer(s) and the affected Union(s) except to the extent that the provisions of this Agreement are inconsistent with said collective bargaining agreements, in which event, the provisions of this Agreement shall prevail; and

WHEREAS, the contracts for the construction of District Projects will be awarded in accordance with the applicable provisions of the California Public Contract Code; and

WHEREAS, the parties signatory to this Agreement pledge their full good faith and trust to work towards mutually satisfactory completion of all District construction Projects subject to the Agreement.

NOW, THEREFORE, the parties, in consideration of the mutual promises and covenants herein contained, do mutually agree as follows:

ARTICLE 1

DEFINITIONS

1.1 "Agreement" means this Project Stabilization Agreement, plus Exhibit A and Exhibit B.

1.2 "District" means the Contra Costa Community College District and the administrative staff under its Chancellor.

1.3 "Contractor(s)/Employer(s)" means any individual, firm, partnership, corporation or other entity, or any combination thereof, including joint ventures, which is an independent business enterprise and has entered into a contract with the District or any of its contractors or subcontractors of any tier, with respect to construction work on any District Project covered by this Agreement.

1.4 "Master Agreement" means the Master Collective Bargaining Agreement of each craft union signatory hereto, copies of which have been made available by the Council to the District and are on file with the Council and which are incorporated herein by reference and designated the "Schedule A(s)," and are listed in Exhibit B.

1.5 "Project Manager" or "Construction Manager" means any employee or business entity(ies) designated by the District to oversee District Projects subject to this Agreement.

1.6 "Project" means any District construction project that has a total minimum estimated construction cost of two million dollars (\$2,000,000) or more. The District may, at its discretion,

designate other project(s) or contract(s) with a total estimated construction cost of less than two million dollars (\$2,000,000) to be covered by this Agreement if the District believes it is in the best interest of the District to do so. Routine maintenance of District properties are not covered by the scope of this Agreement.

1.7. "Union" or "Unions" means the Contra Costa Building and Construction Trades Council, AFL-CIO and its affiliated local unions that have executed this Agreement.

ARTICLE 2

SCOPE OF AGREEMENT AND TERM

2.1. This Agreement shall apply to all on-site demolition, construction, alteration, painting or repair of buildings, structures and other works and related activities on any Project covered by this Agreement that is within the craft jurisdiction of one of the Unions and that is directly or indirectly part of the Project, including, without limitation, pipelines (including those in linear corridors built to serve the Project), pumps, pump stations, start-up, site preparation, on-site survey work, soils and material inspection and testing, including x-ray technicians, and all on-site fabrication work provided such work is within the fabrication provision of a local Master Agreement or national agreement of one of the Unions. On-site fabrication work includes work done for the Project in temporary yards or areas near the Project, and at the site of any batch plant constructed solely to supply materials to the Project. This Agreement also covers all off site work, including fabrication, that is traditionally performed by any of the Unions that are directly or indirectly part of the Project, provided such work is covered by a provision of a local Master Agreement or a local addendum to a national agreement of the applicable Union(s) including delivery and off-haul work to the full extent of the law.

2.2. This Agreement shall govern the award of all construction contracts on all District Projects covered by this Agreement. The District has the absolute right to combine, consolidate, add, or cancel covered Project(s) or portions of covered Project(s). Once a construction Project is completed, it is no longer covered by this Agreement. For the purposes of this Agreement, a construction Project shall be considered completed upon filing of a Notice of Completion.

2.3. All labor disputes involving the application or interpretation of the collective bargaining agreement to which a signatory Contractor/Employer and a signatory Union are parties shall be resolved pursuant to the resolution procedures of the collective bargaining agreement. All disputes relating to the interpretation or application of this Agreement shall be subject to resolution pursuant to the grievance arbitration procedure set forth herein.

2.4. Exclusions:

2.4.1. This Agreement shall be limited to construction work on covered Projects and is not intended to, and shall not, govern any construction work performed at the District at any time prior to the effective date, or after the expiration or termination, of this Agreement.

2.4.2. This Agreement is not intended to, and shall not affect or govern the award of public works contracts by the District which are outside the approved scope of the Projects.

2.4.3. This Agreement is not intended to, and shall not affect the operation or maintenance of the District.

2.4.4. This Agreement shall not apply to a Contractor's/Employer's executives, managerial employees, engineering employees, supervisors (except those covered by existing building and construction trades collective bargaining agreements), and office and clerical employees.

2.4.5. This Agreement shall not apply to employees of the District.

2.4.6. This Agreement shall not apply to contracts awarded pursuant to any emergency public works project(s).

2.4.7 The District shall retain the right at all times to perform and/or subcontract small, incidental portions of related work on the Project site not contracted by the construction contract documents to the signatory Contractor(s) bound to this Agreement.

2.4.8. No provisions negotiated in any Master Agreement solely to apply to work covered by this Project Stabilization Agreement shall apply if such provisions are less favorable to the Contractor for work covered by this Project Stabilization Agreement than those provisions uniformly required of contractors for construction work normally covered by those Master Labor Agreements.

2.4.9 It is the legal obligation of the District to obtain the most competitive bids while maintaining the conditions of the Agreement. To ensure that a competitive bid is received from a range of general contractors, the Contra Costa Building and Construction Trades Council shall assist the District in soliciting interested parties in bidding on the Project(s). Additionally, the District recognizes that multiple subcontractor quotations of bids ensure the most competitive overall bid. The Contra Costa Building and Construction Trades Council shall assist the District in encouraging and soliciting local and other subcontractors in bidding to interested general contractors. In the event the Project bids over the estimated construction cost of the Project, the District reserves the right to request a list of all subcontractors which bid to the two lowest general contractors to verify that adequate competitive bidding was conducted. Additionally, if the project bids are over the estimated construction cost and fewer than three (3) general contractors bid on the Project(s), the District reserves the right, without reservation, to reject all bids and re-bid the Project.

2.4.10 This Agreement shall become effective on the day it is signed by the District, the Contra Costa Building and Construction Trades Council, AFL-CIO, and its affiliated local Unions and shall continue in full force and effect for a period of five (5) years, at which time this Agreement will be reviewed and considered for extension or renewal, with modifications, if appropriate. The terms of this Agreement shall continue to apply to

those Projects subject to this Agreement until construction is completed. The District and the Contra Costa Building and Construction Trades Council may mutually agree in writing to amend, extend or terminate this Agreement at any time. Should either the District or the Contra Costa Building and Construction Trades Council, AFL-CIO, wish to unilaterally terminate this Agreement prior to its expiration, that party must provide written notice to the other party and, if a mutually acceptable resolution cannot be reached, shall submit the request to a neutral arbitrator selected from the following list of arbitrators, through a striking procedure, with a coin toss determining the order of striking, for a final and binding determination whether just cause exists for early termination of the Agreement because it is no longer serving the Purposes, as set forth in the Recitals, herein:

Thomas Angelo
William Riker
Barry Winograd
Jerilou Cossack
William Engler

ARTICLE 3

EFFECT OF AGREEMENT

3.1. By executing this Agreement, the Unions and the District agree to be bound by each and all of the provisions of the Agreement.

3.2. By accepting the award of a construction contract for a Project, whether as contractor or subcontractor, the Contractor/Employer agrees to be bound by each and every provision of the Agreement and agrees that it will evidence its acceptance prior to the commencement of work by executing the Agreement to be Bound in the form attached hereto as Exhibit A.

3.3. At the time that any Contractor/Employer enters into a subcontract with any subcontractor providing for the performance of a Construction Contract, the Contractor/Employer shall provide a copy of this Agreement to said subcontractor and shall require the subcontractor as a part of accepting an award of a construction subcontract to agree in writing to be bound by each and every provision of this Agreement prior to the commencement of work. If a Contractor/Employer requires a subcontractor to agree in writing to comply with the terms of this Agreement as a condition of awarding work to the subcontractor, the Contractor/Employer shall not be liable in any way for the subcontractor's failure to pay the wages and benefits required by this Agreement except as required by the provisions of the California Labor Code.

3.4. Except as enumerated in this Agreement, all other terms and conditions of employment described in the Master Agreement of the Union having traditional and customary jurisdiction over the work shall apply. The provisions of this Agreement shall take precedence over conflicting provisions of any applicable Master Agreement, or any other national, area or local collective bargaining agreement, except that all work performed under the NTL Articles of

Agreement, the National Stack/Chimney Agreement and the National Cooling Tower Agreement; all instrument calibration work and loop checking Covered Work shall be performed under the terms of the UA/IBEW Joint National Agreement for Instrument and Control Systems Technicians, and work within the craft jurisdiction of the Elevator Constructors will be performed under the terms of the National Agreements of the International Union of Elevator Constructors; provided that Articles 4 and 13 of this Agreement shall apply to all Covered Work. In the absence of a conflict, the provisions of the applicable Master Agreements shall govern.

3.5. This Agreement shall only be binding on the signatory parties hereto and shall not apply to the parents, affiliates, subsidiaries or other ventures of any such party.

3.6. This Agreement shall not be effective unless and until the District, the Contra Costa Building and Construction Trades Council AFL-CIO and all the Unions listed on the signature page have signed and dated this Agreement.

ARTICLE 4

WORK STOPPAGES, STRIKES, SYMPATHY STRIKES AND LOCKOUTS

4.1. The Unions, District and Contractor(s)/Employer(s) agree that for the duration of the Program:

4.1.1. There shall be no strikes, sympathy strikes, work stoppages, picketing, handbilling or otherwise advising the public that a labor dispute exists, or slowdowns of any kind, for any reason, by the Unions or employees employed on a covered Project, at the job site of the Project or at any other facility of the District because of a dispute on a covered Project or with a Contractor/Employer on the Project. It shall not be considered a violation of this provision for a Union to withhold labor (but not picket) from any Contractor/Employer who fails to make its timely payment of Trust Fund contributions or fails to meet its weekly payroll. The affected Union shall give 72-hour written notice to the District prior to withholding labor due to a Contractor's failure to make timely payment of Trust Fund contributions or payroll. Although disputes arising between the Unions and Contractor(s)/Employer(s) on other projects are not governed by this Agreement, a Union may not take any action against Contractor(s)/Employer(s) on District property and/or on a District Project because of a dispute between the Unions and Contractor(s)/Employer(s) on other projects.

4.1.1.1 If the arbitrator determines, in accordance with this Article, a work stoppage has occurred, the respondent Union(s) shall, within eight (8) hours of receipt of the decision, direct all of the employees they represent on the Project to immediately return to work. If the craft(s) involved do not return to work by the beginning of the next regularly scheduled shift following such eight (8) hour period after receipt of the arbitrator's decision, and the respondent Union(s) have not complied with their obligations to immediately instruct, order and use their best efforts to cause a cessation of the violation and return the employees they

represent to work, then the non-complying respondent Union(s) shall each pay a sum as liquidated damages to the District, and each will pay an additional sum per shift, as set forth in 4.1.1.3 below, for each shift thereafter on which the craft(s) have not returned to work.

4.1.1.2 If the arbitrator determines in accordance with this Article that a lock-out has occurred, the respondent Contractor(s) shall, within eight (8) hours after receipt of the decision, return all the affected employees to work on the Project, or otherwise correct the violation found by the arbitrator. If the respondent Contractor(s) do not take such action by the beginning of the next regularly scheduled shift following the eight (8) hour period, each non-complying respondent Contractor shall pay or give as liquidated damages, to the affected Union(s) (to be apportioned among the affected employees and the benefit funds to which contributions are made on their behalf, as designated by the arbitrator) and each shall pay an additional sum per shift, as set forth in 4.1.1.3 below, for each shift thereafter in which compliance by the respondent Contractor(s) have not been completed.

4.1.1.3 The arbitrator shall retain jurisdiction to determine compliance with this Section and to establish the appropriate sum of liquidated damages, which shall be not less than One Thousand Dollars (\$1,000.00), nor more than Five Thousand Dollars (\$5,000.00) per shift for each non-complying entity.

4.1.2. As to employees employed on a covered Project, there shall be no lockout of any kind by a Contactor/Employer subject to the Agreement.

4.1.3. If a Master Agreement between a Contractor/Employer and the Union expires before the Contractor/Employer completes the performance of a Construction Contract and the Union or Contractor/Employer gives notice of demands for a new or modified Master Agreement, the Union agrees that it will not strike the Contractor/Employer on said contract for work covered under this Agreement, and the Union and the Contractor/Employer agree that the expired Master Agreement shall continue in full force and effect for work covered under this Agreement until a new or modified Master Agreement is reached between the Union and Contractor/Employer.

4.2. When a remedy is sought for an alleged breach of this Article, any party to this Agreement shall institute the following procedure, prior to any other action at law or equity.

4.2.1. A party invoking this procedure shall notify Thomas Angelo, as the permanent arbitrator, or Robert Hirsch, as the alternate, under this procedure. In the event that the permanent arbitrator is unavailable at any time, the alternate will be contacted. If neither is available, then a selection shall be made from the list of arbitrators in Article 12, Section 12.2. Notice to the arbitrator shall be by the most expeditious means available, with notices by facsimile or telephone to the party alleged to be in violation and to the Contra Costa Building and Construction Trades Council and involved Union if a Union is alleged to be in violation.

4.2.2. Upon receipt of said notice, the District will contact the designated arbitrator named above or his alternate who will attempt to convene a hearing within twenty-four (24) hours if it is contended that the violation still exists.

4.2.3. The arbitrator shall notify the parties by facsimile or telephone of the place and time for the hearing. Said hearing shall be completed in one session, which, with appropriate recesses at the arbitrator's discretion, shall not exceed twenty-four (24) hours unless otherwise agreed upon by all parties. A failure of any party to attend said hearings shall not delay the hearing of evidence or the issuance of any award by the arbitrator.

Thomas Angelo's postal address, phone number, fax number and e-mail address are:

Thomas Angelo
PO Box 1937
Mill Valley CA 94943
Phone: (415) 381-1701
Fax: (415) 380-9792
tangelomv@gmail.com

Robert Hirsch postal address, phone number, and e-mail address are:

Robert Hirsch
PO Box 170428
San Francisco, CA 94117
Phone: 415-362-9999
Rmhirsch@gmail.com

4.2.4. The sole issue at the hearing shall be whether or not a violation of Article 4, Section 4.1 of the Agreement has occurred. The arbitrator shall have no authority to consider any matter of justification, explanation or mitigation of such violation or to award damages, which issue is reserved for court proceedings, if any. The award shall be issued in writing within three (3) hours after the close of the hearing, and may be issued without a written opinion. If any party desires a written opinion, one shall be issued within fifteen (15) days, but its issuance shall not delay compliance with, or enforcement of, the award. The arbitrator may order cessation of the violation of this Article and other appropriate relief and such award shall be served on all parties by hand or registered mail upon issuance.

4.2.5. Such award may be enforced by any Court of competent jurisdiction upon the filing of this Agreement and all other relevant documents referred to above in the following manner. Written notice of the filing of such enforcement proceedings shall be given to the other party. In the proceeding to obtain a temporary order enforcing the arbitrator's award as issued under Section 4.2.4 of this Article, all parties waive the right

to a hearing and agree that such proceedings may be ex parte. Such agreement does not waive any party's right to participate in a hearing for a final order or enforcement. The Court's order or orders enforcing the arbitrator's award shall be served on all parties by hand or delivered by certified mail.

4.2.6. Any rights created by statute or law governing arbitration proceedings inconsistent with the above procedure or which interfere with compliance are waived by the parties.

4.2.7. The fees and expenses of the arbitrator shall be divided equally between the parties to the arbitration.

4.2.8. The parties to this Agreement agree that the labor organizations have not waived their legal rights to undertake otherwise lawful activity with regard to any dispute or disputes which they may have regarding non-Project construction work and operations; provided, however, that any such activities by the signatory Unions shall not disrupt or interfere in any way with any work done at any District site. Recognizing the above and, in order to carry out the principles of this Agreement, the parties agree that should a signatory Union have a dispute with regard to non-covered work on or adjacent to any District site, the signatory Union will notify the Contra Costa Building and Construction Trades Council and shall not undertake on or adjacent to the property, any public activity regarding the dispute. Representatives of the involved Union and the Council shall meet with the representatives of the District to discuss and review the valid, legal manner and means by which the signatory Union may undertake its activities with regard to this dispute (giving due consideration in such discussions and review to the traditional concerns for the ongoing operations of the Project and to the importance of the continuity of the work covered by the Master Agreement), and develop a program which allows the signatory Union to exercise its legal rights but at the same time eliminates any possible disruptive effect on the ongoing Project construction work.

4.2.9. Should any Union or the District (or its Project Manager/Project Contractors/Employers) become aware of a possible or actual labor dispute involving non-Project construction work or operations and involving non-signatory unions which may result in public activity on or about any District site by such non-signatory unions, the representative of each will jointly meet to discuss such activity and to work together, using their best efforts, to avoid having such activity adversely impact or otherwise delay or interfere with ongoing Project construction work.

4.2.10. To the extent any provision in this Article 4 conflicts with the dispute resolution provisions of Public Contract Code section 20104, et seq, this Article 4 shall be null and void.

ARTICLE 5

PRECONSTRUCTION CONFERENCE

5.1. A preconstruction conference shall be held prior to the commencement of each construction Project. Such conference shall be attended by a representative each from the participating Contractor(s)/Employer(s) and Union(s) and the Project Manager.

ARTICLE 6

NO DISCRIMINATION

6.1. The Contractor(s)/Employer(s) and Unions agree not to engage in any form of discrimination on the ground or because of; race, color, creed, national origin, ancestry, age, sex, sexual orientation, disability or Acquired Immune Deficiency Syndrome or AIDS Related Condition (AIDS/ARC), or union status against any employee, or applicant for employment, on the Program.

ARTICLE 7

UNION SECURITY

7.1. The Contractor(s)/Employer(s) recognize the Union(s) as the sole bargaining representative of all craft employees working within the scope of this Agreement.

7.2. No employee covered by this Agreement is required to join any Union as a condition of being first employed on the Project.

7.3. All employees working on the Project shall be governed by the applicable Union security clause of the applicable craft's "Schedule A" Agreement. Employees hired by the Contractor(s)/Employer(s) shall, as a condition of employment, be responsible for the payment of the applicable monthly working dues and any associated fees uniformly required for union membership in the local Union which is signatory to this Agreement. Further, there is nothing in this Agreement that would prevent non-union employees from joining the local Union.

7.4. Authorized representatives of the Unions shall have access to the Projects whenever work covered by this Agreement is being, has been, or will be performed on the Projects, provided it is not disruptive to the work on the Projects or the operation of the District.

ARTICLE 8

REFERRAL

8.1. Contractor(s)/Employer(s) performing construction work on covered Projects shall, in filling craft job requirements be bound by and utilize the registration facilities and referral systems established or authorized by the signatory Unions when such procedures are not in violation of Federal law. The Contractor(s)/Employer(s) shall have the right to reject any applicant referred by the Union(s), in accordance with the applicable Master Agreement.

8.2. The Contractor(s)/Employer(s) shall have the unqualified right to select and hire directly all supervisors above the level of General Foreman it considers necessary and desirable, without such persons being referred by the Union(s). The selection of craft foremen and general foremen shall be entirely the responsibility of the Contractor(s). Foremen and general foremen shall take orders from the designated Contractor(s) representatives.

8.3. In the event that referral facilities maintained by the Unions are unable to fill the requisition of a Contractor/Employer for employees within a forty-eight (48) hour period (Saturday, Sundays and holidays excluded) after such requisition is made by the Contractor/Employer, the Contractor/Employer shall be free to obtain work persons from any source.

8.4. Unions will exert their utmost efforts to recruit sufficient numbers of skilled craft persons to fulfill the requirements of the Contractor(s)/Employer(s). The parties to this Agreement support the development of increased numbers of skilled construction workers from graduates of District schools and residents of Contra Costa County and the surrounding East Bay Area to meet the needs of District Projects and the requirements of the industry generally. Toward that end, the Unions agree to encourage the referral and utilization, to the extent permitted by law and the hiring hall procedures, of qualified graduates of District schools, Contra Costa residents and residents of the East Bay Area as journeymen and apprentices to covered Projects and entrance into such apprenticeship and training programs as may be operated by the Unions.

8.5. Recognizing the special needs of District Projects, the Unions shall consider a Contractor(s)/Employer(s) request to transfer key employees to work on a covered Project in a manner consistent with the Union's referral procedures.

ARTICLE 9

BENEFITS

9.1. All Contractor/Employers agree to pay contributions to the vacation, pension and other form of deferred compensation plan, apprenticeship, and health benefit funds established in the applicable Schedule A for each hour worked on the Project in amounts no less than those designated in the Department of Industrial Relations Wage Determination of the applicable craft.

9.2. The Contractor(s)/Employer(s) shall not be required to pay contributions to any other trust funds that are not contained in the published prevailing wage determination to satisfy their obligation under this Article except those Contractor(s)/Employer(s) who are signatory to the Master Agreements with the respective trades shall continue to pay all trust fund contributions as outlined in such Master Agreements.

9.3. By signing this Agreement, the Contractor(s)/Employer(s) adopt and agree to be bound by the written terms of the legally established Trust Agreements as described in Section 9.1 above specifying the detailed basis on which payments are to be made into, and benefits paid out of, such Trust Funds.

9.4. Wages, Hours, Terms and Conditions of Employment: The wages, hours and other terms and conditions of employment on a Project shall be governed by the Master Agreement of the respective crafts, copies of which shall be on file with the District, to the extent such Master Agreement is not inconsistent with the applicable Department of Industrial Relations Prevailing Wage Determinations which shall establish minimum wages. Where a subject is covered by the Master Agreement and not covered by a Wage Determination or this Agreement, the Master Agreement will prevail. When a subject is covered by both the Master Agreement and this Agreement, to the extent there is any inconsistency, this Agreement will prevail.

ARTICLE 10

LOCAL HIRE

10.1. It is an objective of the parties that not less than 25 percent (25%) of all hours worked by journeyman and apprentices on the Project, on a craft by craft basis, be worked by residents of the area served by the Contra Costa Community College District. The Unions will exert their utmost efforts to recruit sufficient numbers of skilled craft persons to fulfill the requirements of the Contractor(s)/Employer(s). The parties to this Agreement support the development of increased numbers of skilled construction workers from the area served by the District. To the extent allowed by law, and consistent with the local Union's hiring hall provisions, and as long as they possess the requisite skills and qualifications, residents of the area served by the District, including journeyman and apprentices, shall be referred for Project work covered by this Agreement.

ARTICLE 11

COMPLIANCE

11.1. It shall be the responsibility of the Contractor(s)/Employer(s) and Unions to investigate and monitor compliance with the provisions of the Agreement contained in Article 9. Nothing in this agreement shall be construed to interfere with or supersede the usual and customary legal remedies available to the Unions and/or employee benefit Trust Funds to collect delinquent Trust Fund contributions from Employers on the Project. The District shall monitor and enforce compliance with the prevailing wage requirements of the State and Contractor'(s)/Employer'(s) compliance with this Agreement if the District operates a labor compliance program ("LCP") on the Covered Project and if that LCP requires the District to monitor and enforce this compliance.

ARTICLE 12

GRIEVANCE ARBITRATION PROCEDURE

12.1. The parties understand and agree that questions between or among parties signatory to a Master Agreement arising out of or involving the interpretation of a Master Agreement shall be resolved under the grievance procedure provided in that Master Agreement. The parties further understand and agree that in the event any dispute arises out of the meaning, interpretation or application of the provisions of this Agreement, such dispute shall be settled by means of the procedures set out herein. No grievance filed under this Grievance Arbitration Procedure shall be recognized unless the grieving party (Union on its own behalf, or on behalf of an employee whom it represents, or a Contractor/Employer on its own behalf) provides notice in writing to the signatory party with whom it has a dispute within five (5) days after becoming aware of the dispute but in no event more than thirty (30) days after it reasonably should have become aware of the event giving rise to the dispute. The time limits in this Section 12.1 may be extended by mutual written agreement of the parties.

12.2. Grievances shall be settled according to the following procedures:

Step 1: Within five (5) business days after the receipt of the written notice of the grievance, the Business Representative of the involved local Union or his/her designee, or the representative of the employee, and the representative of the involved Contractor/Employer shall confer and attempt to resolve the grievance.

Step 2: In the event that the representatives are unable to resolve the dispute within the five (5) business days after its referral to Step 1, the International Union Representative and the Contractor involved shall meet within seven (7) working days of the referral of the dispute to this second step to arrive at a satisfactory settlement thereof. Meeting minutes shall be kept by the Contractor. In the event that these representatives are unable to resolve the dispute after its referral to Step 2, either involved party may submit it within three (3) business days to the Grievance Committee, which shall meet within five (5) business days after such referral (or such longer time as is mutually agreed upon by all representatives on the Grievance Committee), to confer in an attempt to resolve the grievance. The Grievance Committee shall be comprised of

- two (2) representatives of the District; and
- two (2) representatives of the Contra Costa Building & Construction Trades Council.

If the dispute is not resolved within such time (five (5) business days after its referral or such longer time as mutually agreed upon) it may be referred within five (5) business days by either party to Step 3.

Step 3: Within five (5) business days after referral of a dispute to Step 3, the representatives shall choose a mutually agreed upon arbitrator for final and binding

arbitration. The parties agree that if the permanent arbitrator or his alternate is not available, an arbitrator shall be selected by the alternate striking method from the list of five (5) below:

1. Barry Winograd
2. Thomas Angelo
3. Robert Hirsch
4. William Riker
5. Joseph Grodin

The decision of the Arbitrator shall be binding on all parties. The Arbitrator shall have no authority to change, amend, add to, or detract from, any of the provisions of the Agreement. The expense of the Arbitrator shall be divided equally between the parties to the arbitration.

The Arbitrator shall arrange for a hearing on the earliest available date from the date of his/her selection. A decision shall be given to the parties within five (5) calendar days after completion of the hearing unless such time is extended by mutual agreement. A written opinion may be requested by a party from the presiding Arbitrator.

The time limits specified in any step of the Grievance Procedure set forth in Section 12.2 may be extended by mutual agreement of the parties initiated by the written request of one party to the other, at the appropriate step of the Grievance Procedure. However, failure to process a grievance, or failure to respond in writing within the time limits provided above, without an agreed upon extension of time, shall be deemed a waiver of such grievance without prejudice, or without precedent to the processing of and/or resolution of like or similar grievances or disputes.

In order to encourage the resolution of disputes and grievances at Steps 1 and 2 of this Grievance Procedure, the parties agree that such settlements shall not be precedent setting.

ARTICLE 13

JURISDICTIONAL DISPUTES

13.1. The assignment of Covered Work will be solely the responsibility of the Employer performing the work involved; and such work assignments will be in accordance with the Plan for the Settlement of Jurisdictional Disputes in the Construction Industry (the "Plan") or any successor Plan.

13.2. All jurisdictional disputes on this Project between or among the Building and Construction Trades Unions and their employers, parties to this Agreement, shall be settled and

adjusted according to the present Plan established by the Building and Construction Trades Department or any other plan or method of procedure that may be adopted in the future by the Building and Construction Trades Department. Decisions rendered shall be final, binding and conclusive on the Employers and Unions parties to this Agreement.

13.2.1. For the convenience of the parties, and in recognition of the expense of travel between Northern California and Washington, DC, at the request of any party to a jurisdictional dispute under this Agreement an Arbitrator shall be chosen by the procedures specified in Article V, Section 5, of the Plan from a list composed of John Kagel, Thomas Angelo, Robert Hirsch, and Thomas Pagan, and the Arbitrator's hearing on the dispute shall be held at the offices of the applicable Building and Construction Trades Council. All other procedures shall be as specified in the Plan.

13.3. All jurisdictional disputes shall be resolved without the occurrence of any strike, work stoppage, or slow-down of any nature, and the Employer's assignment shall be adhered to until the dispute is resolved. Individuals violating this Section shall be subject to immediate discharge.

13.4. Each Employer will conduct a pre-job conference with the Local Council prior to commencing work. Primary Employer will be advised in advance of all such conferences and may participate if they wish. Pre-job conferences for different Employers may be held together.

ARTICLE 14

APPRENTICES

14.1. Recognizing the need to maintain continuing support of programs designed to develop adequate numbers of competent workers in the construction industry, the Contractor(s)/Employer(s) shall employ apprentices of a State-approved Apprenticeship Program in the respective crafts to perform such work as is within their capabilities and which is customarily performed by the craft in which they are indentured.

14.2. The apprentice ratios will be in compliance with the applicable provisions of the California Labor Code and Prevailing Wage Rate Determination.

14.3. There shall be no restrictions on the utilization of apprentices in performing the work of their craft provided they are properly supervised.

ARTICLE 15

HELMETS TO HARDHATS

15.1. The Contractors/Employers and Unions recognize a desire to facilitate the entry into the building and construction trades of veterans and members of the National Guard and Reserves who are interested in careers in the building and construction industry. The

Contractors/Employers and Unions agree to utilize the services of the Center for Military Recruitment, Assessment and Veterans Employment (hereinafter "Center"), a joint Labor-Management Cooperation Trust Fund, established under the authority of Section 6(b) of the Labor-Management Cooperation Act of 1978, 29 U.S.C. Section 175(a), and Section 302(c)(9) of the Labor-Management Relations Act, 29 U.S.C. Section 186(c)(9), and a charitable tax exempt organization under Section 501(c)(3) of the Internal Revenue Code, and the Center's "Helmets to Hardhats" program to serve as a resource for preliminary orientation, assessment of construction aptitude, referral to apprenticeship programs or hiring halls, counseling and mentoring, support network, employment opportunities and other needs as identified by the parties.

15.2. The Unions and Contractors/Employers agree to coordinate with the Center to create and maintain an integrated database of veterans and members of the National Guard and Reserves interested in working on this Project and of apprenticeship and employment opportunities for this Project. To the extent permitted by law, the Contractors/Employers and Unions will give credit to such veterans and members of the National Guard and Reserves for bona fide, provable past experience.

15.3. In recognition of the work of the Center and the value it offers to the Project, Contractors/Employers performing work on the Project, on a voluntary basis, may elect to contribute to the Center the amount of one cent (\$0.01) per hour for each hour worked by each individual employee covered by this Agreement. Any such payments shall be forwarded monthly to the Center in a form and manner to be determined by the Center's Trustees.

15.4. The Center shall function in accordance with, and as provided in the Agreement and Declaration of Trust creating the fund, and any amendments thereto, and any other of its governing documents. Each Contractor(s)/Employer(s) electing to contribute to the Center approves and consents to the appointment of the Trustees designated pursuant to the Trust Agreement establishing the Center and hereby adopts and agrees to be bound by the terms and provisions of the Trust Agreement.

ARTICLE 16

MANAGEMENT RIGHTS

16.1. The Contractor(s)/Employer(s) shall retain full and exclusive authority for the management of their operations, including the right to direct their work force in their sole discretion. No rules, customs or practices shall be permitted or observed which limit or restrict production, or limit or restrict the working efforts of employees except that lawful manning provisions in the Master Agreement shall be recognized.

16.2. Except as provided in Section 2.1, there shall be no limitation or restriction upon the choice of materials or upon the full use and installation of equipment, machinery, package units, factory pre-cast prefabricated or preassembled materials, tools or other labor saving devices. The on-site installation or application of all items shall be performed by the craft having jurisdiction over such work; provided, however, it is recognized that installation of specialty items which may be furnished by the owner of the Project or a Contractor shall be performed by

construction persons employed under this Agreement who may be directed by other personnel in a supervisory role, provided, however, in limited circumstances requiring special knowledge of the particular item(s), may be performed by construction persons of the vendor or other companies where necessary to protect a manufacturer's warranty. In such instances all provisions of this Agreement shall apply. The issue of whether it is necessary to use construction persons of the vendor or other companies to protect the manufacturer's warranty shall be subject to the grievance and arbitration clause of this Agreement.

ARTICLE 17

SAVINGS CLAUSE

17.1 The parties agree that in the event any article, provision, clause, sentence or word of the Agreement is determined to be illegal or void as being in contravention of any applicable law, by a court of competent jurisdiction such as the Department of Industrial Relations, the Division of Apprenticeship Standards, and other applicable labor related governmental agencies the remainder of the Agreement shall remain in full force and effect. The parties further agree that if any article, provision, clause, sentence or word of the Agreement is determined to be illegal or void, by a court of competent jurisdiction or other labor related governmental authorities, the parties shall substitute, by mutual agreement, in its place and stead, an article, provision, clause, sentence or word which will meet the objections to its validity and which will be in accordance with the intent and purpose of the article, provision, clause, sentence or word in question.

ARTICLE 18

MISCELLANEOUS PROVISIONS

18.1 Counterparts: This Agreement may be executed in counterparts, such that original signatures may appear on separate pages, and when bound together all necessary signatures shall constitute an original. Facsimile signature pages transmitted to other parties to this Agreement shall be deemed equivalent to original signature.

18.2 Warranty of Authority: Each of the persons signing this Agreement represents and warrants that such person has been duly authorized to sign this Agreement on behalf of the party indicated, and each of the parties by signing this Agreement warrants and represents that such party is legally authorized and entitled to enter into this Agreement.

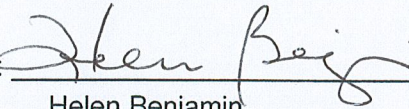
18.3 Ratification by Governing Board: This Agreement shall not be binding on the District until it is approved by the Contra Costa Community College District Governing Board.

18.4 The Agreement shall be included as a condition of the award of all Construction Contracts that are a part of the PSA Program.

18.5 The parties shall establish and implement reasonable substance abuse testing procedures and regulations, which may include prehire, reasonable cause, random and post-

accident testing, to the extent permitted and/or required by Federal and State Law. Should the District administrator for the PSA approve an established program to which signatory Unions are currently a party, such program may become the Project-wide substance abuse testing program, after consultation with the Unions. Until there is such a Project-site substance abuse testing procedure negotiated by the District administrator and the Unions for the PSA, such substance abuse testing procedures as are contained in the Schedule A's shall be applicable to work on the Project, pursuant to their terms.

Contra Costa Community College District

BY:  DATE: 10-22-12
Helen Benjamin
Chancellor

Contra Costa Building & Construction Trades
Council AFL-CIO (Council)

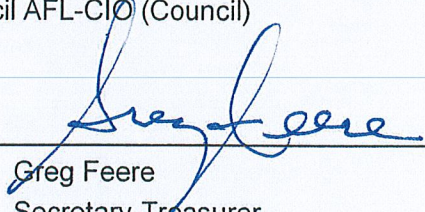
BY:  DATE: Oct. 22, 2012.
Greg Feere
Secretary-Treasurer
Business Manager

Exhibit A
Agreement to Be Bound

Project Stabilization Agreement

The undersigned, as a Contractor on the Contra Costa Community College Project Stabilization Agreement "Project", subject to the Project Stabilization Agreement "Agreement", for and in consideration of the award to it of a contract to perform work on said Project, and in further consideration of the promises made in the Agreement and all attachments, a copy of which was received and is acknowledged, hereby:

1. Accepts and agrees to be bound by the terms and conditions of the Agreement together with any and all amendments and supplements now existing or which are later made thereto only for the duration and scope of the Contractor's work on the Project.

2. The Contractor agrees to be bound by the legally established trust agreements designated in local master collective bargaining agreements. The Contractor authorizes the parties to such local trust agreements to appoint trustees and successor trustee to administer the trust funds and hereby ratifies and accepts the trustees so appointed as if made by the Contractor.

3. Certifies that it has no commitments or agreements which would preclude its full and complete compliance with the terms and conditions of said Agreement.

4. Agrees to secure from any Contractor(s) (as defined in said Agreement) which are or become a subcontractor (of any tier) to it a duly executed Agreement to be Bound in a form identical to this document.

Signature of (Sub)Contractor

Date

(Authorized Officer & Title)

Contractor's State License #

Exhibit B

List of "Schedule A" Agreements:

Collective Bargaining Agreements of each craft signatory to this Project Stabilization Agreement

1. Asbestos Workers Local 16
2. Boilermakers Local 549
3. Bricklayers Local 3
4. Northern California Regional Council of Carpenters for and on Behalf of Their Affiliated Crafts
5. Sheet Metal Workers Local 104
6. Operating Engineers Local 3
7. Painters District Council 16
8. Sprinkler Fitters Local 483
9. United Association Local 342
10. Teamsters Local 315
11. Hod Carriers Local 166
12. Roofers Local 81
13. Iron Workers Local 378
14. Laborers Local Union 324
15. Laborers Local Union 67
16. Cement Masons Local 300
17. Electrical Workers Local 302
18. Plasterers Local 66
19. United Association Local 159
20. United Association Local 355
21. Elevator Constructors Local 8

SIGNATURE PAGE
UNIONS

Neil Bresnahan

Asbestos Workers Local 16

Hod Carriers Local 166

Boilermakers Local 549

Roofers Local 81

Bricklayers Local 3

Iron Workers Local 378

Northern California Regional Council
of Carpenters for and on Behalf of
Their Affiliated Crafts

Laborers Local Union 324

Laborers Local Union 67

Sheet Metal Workers Local 104

Cement Masons Local 300

Operating Engineers Local 3

Electrical Workers Local 302

Painters District Council 16

Plasterers Local 66

Sprinkler Fitters Local 483

United Association Local 159

United Association Local 342

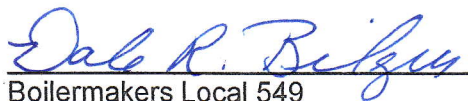
United Association Local 355

Teamsters Local 315

Elevator Constructors Local 8

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UNIONS

Asbestos Workers Local 16


Boilermakers Local 549

Bricklayers Local 3

Northern California Regional Council
of Carpenters for and on Behalf of
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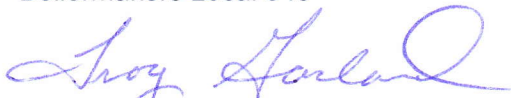
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Roofers Local 81



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Asbestos Workers Local 16

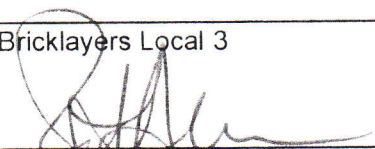
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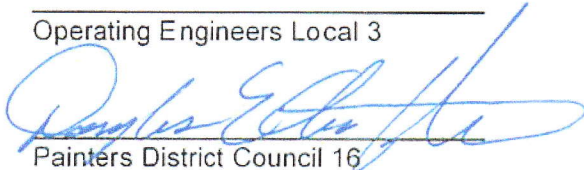
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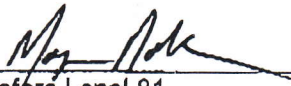
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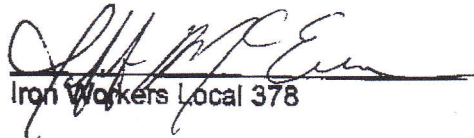
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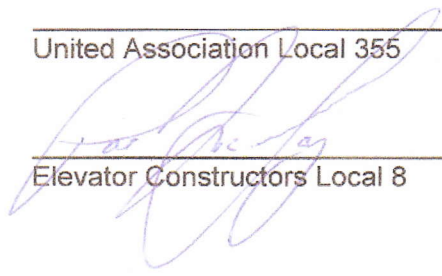
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SECTION 00650

NOTICE TO PROCEED

Date: _____

TO: _____

ADDRESS: _____

PROJECT: _____

You are notified that the Contract Time under the above contract will commence to run on _____ . By that date, you are to start performing your obligations under the Contract Documents. In accordance with Section 00600, Construction Agreement, the date of Substantial Completion is _____, and the date for Final Completion is _____.

CONTRA COSTA COMMUNITY COLLEGE DISTRICT

By : _____

Ben Cayabyab
Contracts Manager

END OF DOCUMENT

SECTION 00700

GENERAL CONDITIONS

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ARTICLE 1

GENERAL CONDITIONS

1.1 BASIC DEFINITIONS

1.1.1 Action of the Governing Board is a vote of a majority of the District's governing board.

1.1.2 Approval for a Contract, Agreement, or Change Order means written authorization through action of the governing board unless specific delegation of approval authority is delegated to a District representative.

1.1.3 Approved. The term "approved," when used to convey Architect's action on Contractor's submittals, applications, and requests, is limited to Architect's duties and responsibilities as stated in the Conditions of the Contract.

1.1.4 Architect means the architect, engineer, or other design professional engaged by the District to design and perform general observation of the work of construction and interpret the drawings and specifications for the Project.

1.1.5 As shown, as indicated, as detailed refer to drawings accompanying this specification.

1.1.6 Bid/Bidders. The term Bid and Proposal have the same meaning, and the same is true for Bidders and Proposers.

1.1.7 Contract or Agreement. When the terms are used in these General Conditions shall be references to the Contract Documents as defined herein.

1.1.8 Contract Time. Contract Time means the number of consecutive calendar days specified in the contract immediately after the date to commence work issued by Owner in the Notice to Proceed and includes both the time allowed for completion of the work required to achieve Substantial Completion and the time allowed to complete the Remaining Work.

1.1.9 Contractor. Whenever the term "Contractor" is used in the Contract or elsewhere in the Contract Documents, it refers to a person or entity that has an agreement directly with the District to perform any of the work for the Project. The term Contractor is referred to throughout the Contract Documents as if singular in number and masculine in gender and means a Contractor or his authorized representative. The term Contractor does not include any contractors under separate and direct contract with the District. A Subcontractor is a person or entity that has a direct or indirect contract with the Contractor to perform any of the Work at the site.

1.1.10 Contractor's Construction Schedule. The document prepared by the Contractor, which details the events of construction and establishes completion dates for the various stages of the Work and the entire project.

1.1.11 The Contract Documents. The Contract Documents consist of the Agreement between District and Contractor (hereinafter the Agreement or Contract), Conditions of the Contract (General, Supplementary and other Conditions), Drawings, Specifications, addenda issued prior to bid, instructions

to bidders, notice to bidders, and the requirements contained in the Bid Documents, other documents listed in the Agreement, and Modifications issued after execution of the Contract. A Modification is a written amendment to the Contract signed by parties, a Change Order, a Construction Change Directive, or a written order for a minor change in the Work issued by the Architect. The Contract Documents collectively form the Contract. The Contract represents the entire and integrated agreement between the parties hereto and supersedes prior negotiations, representations, or agreements, either written or oral. The Contract may be amended or modified only by a written Modification. The Contract Documents shall not be construed to create a contractual relationship of any kind between the Architect and Contractor, between the District and any Subcontractor or Sub-subcontractor, or between any persons or entities other than the District and the Contractor. The Architect shall, however, be entitled to performance and enforcement of obligations under the Contract intended to facilitate performance of the Architect's duties.

1.1.12 Contractor, District, and Architect are those mentioned as such in the Agreement. They are treated throughout the Contract Documents as if they are of singular number and neuter gender. Any reference to "Owner" shall mean "District."

1.1.13 Construction Manager. Whenever the term "Construction Manager" or "CM" is used in the contract or elsewhere in the Contract Documents, it refers to the District assigned Construction Manager, or the District Project Manager if no CM is assigned.

1.1.14 Days means calendar days, unless otherwise noted as working days.

1.1.15 Directed. Terms such as "directed," "requested," "authorized," "selected," "approved," "required," and "permitted" mean directed by the Architect or the District, requested by the Architect or District, and similar phrases.

1.1.16 District. Whenever the term "District" is used in the Contract Documents, it refers to the Contra Costa Community College District or those persons designated by the District to act in/on its behalf.

1.1.17 The Drawings are graphic and pictorial portions of the Contract Documents prepared for the Project and approved changes thereto, wherever located and whenever issued, showing the design, location, and scope of the Work, generally including plans, elevations, sections, details, schedules, and diagrams as drawn or approved by the Architect.

1.1.18 Emergency shall be defined as a sudden, unexpected occurrence, involving a clear and imminent danger, demanding immediate action to prevent or mitigate loss of, or damage to, life, health, property, or essential public services. Emergency includes such occurrences as fire, flood, earthquake, or other soil or geologic movements, as well as such occurrences as riot, accident, or sabotage.

1.1.19 Exposed. Whenever this term is used it shall be understood to mean any item or surface, exterior, or interior, which can be seen by a person outside the building, or seen by a person inside any usable space within the building during normal activity. Mechanical and electrical rooms, utility and service tunnels, air handling rooms, and penthouses or platforms shall be considered to have exposed surfaces, as shall the mechanical and electrical construction within them. The interior of closets and alcoves shall be considered exposed surfaces, and shall be finished to match the finish of the adjoining room or space, unless another finish is shown. The interiors of cabinets shall be considered exposed, but a finish different from that of the exterior may be permitted or specified. Spaces which are not normally

occupied or used by occupants or building staff, such as shafts, hoistways, ceiling plenums, attics and crawl spaces shall be considered “concealed” spaces, unless finishes are shown or specified for their surfaces.

1.1.20 Final Completion. The date when all Work for the total project has been completed in accordance with the terms of the Contract Documents and has been inspected following completion of Work identified in the Punchlist Inspection and accepted by the Architect and the District.

1.1.21 Furnish. Whenever this term is used it shall be understood to mean “purchase and deliver to the project site” ready for unloading, unpacking, assembly, installation, and similar operations.

1.1.22 Governing Dictionary. The definitions of words used in these Specifications, which are not defined, The General Conditions, or in referenced standards, are as given in “The American Heritage Dictionary of the English Language”.

1.1.23 Indicated. The term “indicated” refers to graphic representations, notes, or schedules on Drawings or to other paragraphs or schedules in Specifications and similar requirements in the Contract Documents. Terms such as “shown,” “noted,” “scheduled,” and “specified” are used to help the user locate the reference.

1.1.24 Inspector of Record is the individual retained by the District in accordance with titles 21 and 24 of the California Code of Regulations and who will be assigned to the Project. May also be referred to as the Project Inspector.

1.1.25 Install. Whenever this term is used it shall be understood to mean “receive, unload, inventory, store and be responsible for at the project site, transport from point of receipt to final destination, protect, unpack, erect, install in place, anchor, connect, apply, and place in operation or finish, cleaning, complete for intended use.”

1.1.26 Installer. An installer is the Contractor or another entity engaged by Contractor as an employee, Subcontractor, or Sub subcontractor, to perform a particular construction operation, including installation, erection, application, and similar operations. Using a term such as “carpentry” does not imply that certain construction activities must be performed by accredited or unionized individuals of a corresponding generic name, such as “carpenter.” It also does not imply that requirements specified apply exclusively to trades people of the corresponding generic name.

1.1.27 Locality in which the work is performed means the county in which the Project is located.

1.1.28 Option. Whenever this term is used it shall be understood to mean a choice from among the specified products or procedures which shall be made by the Contractor. The choice is not “whether” the work is to be performed, but “which” product or “which” procedure is to be used. The product or procedure chosen by the Contractor shall be provided at no increase in the cost to the District with no lessening of the Contractor’s responsibility for its performance. All or any options selected or proposed are still subject to all requirements for submittals and for approval of same.

1.1.29 Or Equal and Or Approved Equal. The terms “or equal” and “or approved equal” shall mean “or equal as approved in writing by the Architect”.

1.1.30 The Project is the complete construction of the Work performed in accordance with the Contract Documents.

1.1.31 The Project Manual. The Project Manual is the volume assembled for the Work which may include, without limitation, the bidding requirements, sample forms, Conditions of the Contract, and Specifications.

1.1.32 The Project Site. Project site is the space available for performing construction activities. The extent of Project site is shown on Drawings and may or may not be identical with the description of the land on which Project is to be built.

1.1.33 Provide shall include “provide complete in place,” that is “furnish and install.” Complete and ready for the intended use.

1.1.34 Punch List Inspection. The inspection performed by the Construction Manager, Architect and the District upon written notification by the Contractor that the Work is substantially complete.

1.1.35 Regulations. The term “regulations” includes laws, ordinances, statutes, and lawful orders issued by authorities having jurisdiction, as well as rules, conventions, and agreements within the construction industry that control performance of the Work.

1.1.36 Remaining Work. Remaining Work means the work required by the Contract, but not required for Substantial Completion, that the District or Architect determines has not been satisfactorily completed at the time of Substantial Completion, deferred commissioning requirements, deferred and seasonal testing, and all maintenance and operating instructions, schedules, reports, guaranties, warranties, bonds, certificates of inspection, marked-up As-Built documents, prevailing wage compliance reports and all other documents as required by the Contract Documents. Remaining Work may also be referred to as Punch List work.

1.1.37 Safety Orders are those issued by any cognizant city, county, state or federal agency.

1.1.38 Site refers to the grounds of the Project as defined in the Contract Documents and such adjacent lands as may be directly affected by the performance of the Work.

1.1.39 The Specifications. The Specifications are that portion of the Contract Documents consisting of the written requirements for material, equipment, construction systems, instructions, quality assurance standards, workmanship, and performance of related services.

1.1.40 Specification Language. These Specifications are written in the imperative mood, as defined in the Construction Specifications Institute’s Manual of Practice. Imperative language is directed to the Contractor. The indicative mood is employed on occasion when such sentence structure is necessary to convey the intended meaning in a more accurate or understandable form. The text is streamlined, with the colon (:) employed as a symbol for the words “shall be”, “shall have”, “shall conform with”, “shall comply with”, or “shall meet the requirements of”. The colon is also used to separate a paragraph title or heading from the text that follows.

1.1.41 Standards, Rules, and Regulations referred to are recognized printed standards and shall be considered as one and a part of these specifications within limits specified. Federal, state and local regulations are incorporated into the Contract Documents by reference.

1.1.42 Subcontractor, as used herein, includes those having direct or indirect contracts with Contractor and ones who furnished labor, material or services for a special design according to drawings and specifications of this Work, but does not include ones who merely furnish material not so worked.

1.1.43 Substantial Completion. The date on which the Work or designated portion thereof, as certified by the District Project Manager and Architect, is sufficiently complete, in accordance with the Contract Documents, so the District, may occupy or utilize the Work or designated portion thereof for the use for which it is intended.

1.1.44 Surety is the person, firm, or corporation that executes as surety the Contractor's Performance Bond and Payment Bond.

1.1.45 Work of the Contractor or Subcontractor shall include all labor, materials and equipment necessary for the Contractor to fulfill all of its obligations pursuant to the Contract Documents. It shall include the initial obligation of any Contractor or Subcontractor who performs any portion of the Work, to visit the Site of the proposed Work (a continuing obligation after the commencement of the Work), to fully acquaint and familiarize itself with the conditions as they exist and the character of the operations to be carried out under the Contract Documents, and make such investigation as it may see fit so that it shall fully understand the facilities, physical conditions, and restrictions attending the Work under the Contract Documents. Each such Contractor or Subcontractor shall also thoroughly examine and become familiar with the Drawings, Specifications, and associated bid documents before preparing and submitting any bid.

1.1.46 Workers includes laborers, workers, and mechanics.

1.2 EXECUTION, CORRELATION AND INTENT

1.2.1 Correlation and Intent

1.2.1.1 *Documents Complementary and Inclusive*. The Contract Documents are complementary; what is required by one shall be as binding as if required by all. The Contract Documents will be construed in accordance with the laws of the State of California and applicable building codes and statutes of the City and/or County where the Project is located. The intent of the Contract Documents is to describe and provide for a functionally complete and operational Project (or part thereof) to be constructed in accordance with the Contract Documents. All Work, materials, and equipment that may reasonably be inferred from the Contract Documents or from prevailing custom or trade usage as necessary to properly execute and complete the Work to conform to the requirements of the Contract Documents and provide for a functionally complete and operational Project shall be provided by Contractor with no change in the Contract Sum or Contract Time. A typical or representative detail on the Drawings shall constitute the standard for workmanship and material throughout corresponding parts of the Work. Where necessary, and where reasonably inferable from the Drawings, Contractor shall adapt such representative detail for application to such corresponding parts of the Work with no change in the Contract Sum or Contract Time. The details of such adaptation shall be submitted to the City for approval. Repetitive features shown in outline on the Drawings shall be in exact accordance with corresponding features completely shown. All Contract Documents form the Contractor's contract with the District. Any item of Work

mentioned in the Specifications and not shown on the Drawings, or shown on the Drawings and not mentioned in the Specifications, shall be provided by Contractor as if shown or mentioned in both. Ambiguities or inconsistencies arising as a result of separation of sections or portions of the drawings or specifications by or for subcontractor bidding shall not relieve the Contractor for providing the complete Work at the Contract Price and within the Contract Time.

1.2.1.2 *Coverage of the Drawings and Specifications.* The Drawings and Specifications generally describe the Work to be performed by Contractor. Generally, the Specifications describe Work which cannot be readily indicated on the Drawings and indicate types, qualities, and methods of installation of the various materials and equipment required for the Work. It is not intended to mention every item of Work in the Specifications, which can be adequately shown on the Drawings, or to show on the Drawings all items of Work described or required by the Specifications even if they are of such nature that they could have been shown. All materials or labor for Work, which is shown on either the Drawings or the Specifications (or is reasonably inferable therefrom as being necessary to complete the Work), shall be provided by the Contractor to provide a complete project. It is intended that the Work be of sound, quality construction, and the Contractor shall be responsible for the inclusion of adequate amounts to cover installation of all items indicated, described, or implied in the portion of the Work to be performed by them.

1.2.1.3 *Conflicts.* In the event there is a discrepancy between the various Contract Documents, the more stringent, higher quality, and greater quantity of Work shall apply.

1.2.1.4 *Conformance with Laws.* Each and every provision of law required by law to be inserted in this Contract shall be deemed to be inserted herein, and the Contract shall be read and enforced as though it were included herein, even if through mistake or otherwise any such provision is not inserted, or is not correctly inserted. Before commencing any portion of the Work, Contractor shall check and review the Drawings and Specifications for such portion for conformance and compliance with all laws, ordinances, codes, rules and regulations of all governmental authorities and public and municipal utilities affecting the construction and operation of the physical plant of the Project, all quasi-governmental and other regulations affecting the construction and operation of the physical plant of the Project, and other special requirements, if any, designated in the Contract Documents. Such checking shall include Title 21 and Title 24 of the California Code of Regulations, California Building Code, local utility, local water connection, local grading and all other applicable agencies. In the event Contractor observes any violation of any law, ordinance, code, rule or regulation, or inconsistency with the Contract Documents, Contractor shall, within five (5) days, notify Architect and District in writing of same and shall ensure that any such violation or inconsistency shall be corrected in the manner provided hereunder prior to the construction of that portion of the Project. The Contractor shall bear all expenses of correcting Work done contrary to said laws, ordinances, rules, and regulations if the Contractor performed same (1) without first consulting the Architect for further instructions regarding said Work or (2) disregarded the Architect's instructions regarding said work.

1.2.1.5 *Ambiguity and Inconsistency.* Before commencing any portion of the Work, Contractor shall carefully examine all Drawings and Specifications and other

information given to Contractor as to materials and methods of construction and other Project requirements. Contractor shall, within five (5) days, notify Architect and District in writing of any perceived or alleged error, inconsistency, conflict, ambiguity, or lack of detail or explanation in the Drawings and Specifications in the manner provided herein. If the Contractor or its Subcontractors, material or equipment suppliers, or any of their officers, agents, and employees performs, permits, or causes the performance of any Work under the Contract Documents, which it knows or should have known to be in error, inconsistent, or ambiguous, or not sufficiently detailed or explained, Contractor shall bear any and all costs arising therefrom including, without limitation, the cost of correction thereof without increase or adjustment to the Contract Price or the time for performance. If Contractor performs, permits, or causes the performance of any Work under the Contract Documents prepared by or on behalf of Contractor which is in error, inconsistent or ambiguous, or not sufficiently detailed or explained, Contractor shall bear any and all resulting costs, including, without limitation, the cost of correction, without increase to or adjustment in the Contract Price or the Time for performance. Ambiguities or inconsistencies arising as a result of separation of sections or portions of the drawings or specifications by or for subcontractor bidding shall not relieve the Contractor for providing the complete Work without increase to or adjustment in the Contract Price or the Time for performance.

1.2.2 Addenda and Deferred Approvals

1.2.2.1 *Addenda* are the changes in specifications, drawings, and contract documents, which have been authorized in writing by the District or Architect prior to receipt of bids, and which alter, explain, or clarify the contract documents. Addenda shall govern over all other Contract Documents. Subsequent addenda issued shall govern over prior addenda unless otherwise specified in the addenda.

1.2.2.2 *Deferred Approvals*. Contract Documents which require deferred approval items are meant to be for illustration purposes only. Contractor is responsible for all deferred approval requirements set forth in the Contract Documents. Contractor is responsible to comply with all laws, building codes, and regulations necessary to obtain all necessary approvals, including those required from the Division of the State Architect (“DSA”) and the State Fire Marshall. Contractor shall not be granted an extension of time for failure to obtain necessary approvals due to failure to comply with laws, building codes, and other regulations (including Title 24 of the California Code of Regulations). Contractor shall schedule all deferred approval items in its progress schedule pursuant to Article 3. If Contractor fails to include deferred-approval items in its schedule which results in a critical path delay, then Contractor shall be subject to the assessment of liquidated damages.

1.2.2.3 *Deferred Approval Requirements*. Deferred approvals shall be submitted and processed pursuant to the requirements of Division 1 of the Specifications. All deferred approvals shall be prepared by Contractor or Contractor’s agent early enough so as to not delay the Project. Contractor is aware that Title 21 California Code of Regulations Section 17(g) and Title 24 California Code of Regulations Section 4-317 have specific requirements for deferred approval as to governing agencies and as to the Architect and Engineer for the Project. As a result, any delay associated with the time for

approval by applicable agencies or by the Architect or Architect's consultants shall be Contractor's.

1.2.3 Specification Interpretation

1.2.3.1 *Titles.* The Specifications are separated into titled sections for convenience only and not to dictate or determine the trade or craft involved.

1.2.3.2 *As Shown, Etc.* Where "as shown," "as indicated," "as detailed," or words of similar import are used, reference is made to the Drawings accompanying the Specifications unless otherwise stated. Where "as directed," "as required," "as permitted," "as authorized," "as accepted," "as selected," or words of similar import are used, the direction, requirement, permission, authorization, approval, acceptance, or selection by Architect is intended unless otherwise stated.

1.2.3.3 *General Conditions.* The General Conditions and supplementary general conditions are a part of each and every section of the Specifications.

1.2.3.4 *Abbreviations.* In the interest of brevity, the Specifications are written in an abbreviated form and may not include complete sentences. Omission of words or phrases such as "Contractor shall," "shall be," etc., are intentional. Nevertheless, the requirements of the Specifications are mandatory. Omitted words or phrases shall be supplied by inference in the same manner as they are when a "note" occurs on the Drawings. In the interest of brevity, the Contract Documents frequently omit modifying words such as "all" and "any" and articles such as "the" and "an," but the fact that a modifier or an article is absent from one statement and appears in another is not intended to affect the interpretation of either statement.

1.2.3.5 *Plural.* Words in the singular shall include the plural whenever applicable or the context so indicates.

1.2.3.6 *Metric.* The Specifications may indicate metric units of measurement as a supplement to U.S. customary units. When indicated thus: 1" (25 mm), the U. S. customary unit is specific, and the metric unit is nonspecific. When not shown with parentheses, the unit is specific. The metric units correspond to the "International System of Units" (SI) and generally follow ASTM E 380, "Standard for Metric Practice."

1.2.3.7 *Standard Specifications.* Any reference to standard specifications of any society, institute, association, or governmental authority is a reference to the organization's standard specifications, which are in effect at the date of the Contractor's proposal unless directed otherwise. If applicable specifications are revised prior to completion of any part of the Work, the Contractor may, if acceptable to Architect, perform such Work in accordance with the revised specifications. The standard specifications, except as modified in the Specifications for the Project, shall have full force and effect as though printed in the Specifications. Architect will furnish, upon request, information as to how copies of the standard specifications referred to may be obtained.

1.2.4 Rules of Document Interpretation

1.2.4.1 In the event of conflict within the drawings, the following rules shall apply:

- (a) General Notes, when identified as such, shall be incorporated into other portions of Drawings.
- (b) Schedules, when identified as such, are complementary with other notes and other portions of Drawings including those identified as General Notes.
- (c) Larger scale drawings shall take precedence over smaller scale drawings.
- (d) At no time shall the Contractor base construction on scaled drawings.

1.2.4.2 Specifications shall govern as to materials, workmanship, and installation procedures.

1.2.4.3 If Contractor observes that drawings and specifications are in conflict, Contractor shall, within five (5) days, notify the Architect in writing for the purposes of obtaining an interpretation of the Contract Documents.

1.2.4.4 In the case of conflict or inconsistencies, the order of precedence shall be as follows:

- (a) General Conditions take precedence over Drawings and Specifications.
- (b) Special Conditions take precedence over General Conditions.
- (c) The Agreement shall take precedent over the Special Conditions.
- (d) In the case of disagreement or conflict between or within standards, specifications, and drawings, the more stringent, higher quality, and greater quantity of Work shall apply.

1.3 OWNERSHIP AND USE OF ARCHITECT'S DRAWINGS, SPECIFICATIONS AND OTHER DOCUMENTS

The Drawings, Specifications, and other contract documents for the Project are the property of the District and/or Architect pursuant to Education Code § 17316. The Contractor may retain one contract record set. Neither the Contractor nor any Subcontractor, or material or equipment supplier shall own or claim a copyright in the Drawings, Specifications, and other documents prepared by the Architect. All copies except the Contractor's record set, shall be returned or properly accounted for upon completion of the Work. The Drawings, Specifications, and other documents prepared by the Architect, and copies thereof furnished to the Contractor are not to be used by the Contractor or any Subcontractor, Sub-subcontractor, or material or equipment supplier on other projects or for additions to this Project outside the scope of the Work. The District and/or Architect hereby grants the Contractor, Subcontractors, Sub-subcontractors, and material or equipment suppliers a limited license to use applicable portions of the Drawings, Specifications, and other documents prepared for the Project in the execution of their Work under the Contract Documents. Submittal or distribution to meet official regulatory requirements or for other purposes in connection with this Project is not to be construed as publication in derogation of the District's property interest or other reserved right.

ARTICLE 2

DISTRICT

2.1 INFORMATION AND SERVICES REQUIRED OF THE DISTRICT

2.1.1 Site Survey.

If applicable, the District will furnish, at its expense, a legal description of the Site and a land survey showing the boundaries of the Site. Contractor shall be responsible for all surveys regarding location of construction, grading and site work.

2.1.2 Soils.

When required by the scope of the Project, the District will furnish, at its expense, the services of geotechnical engineers or consultants when reasonably required and deemed necessary by the Architect or as required by local or state codes. Such services, with written reports and appropriate written professional recommendations, may include test boring, test pits, soil bearing values, percolation tests, air and water pollution tests, and ground corrosion and resistivity tests, including necessary operations for determining subsoil, air, and water conditions.

2.1.3 Contractor Reliance.

If appropriate to the Work, a soils investigation report has been obtained from test holes at the Site, and such report is available for the Contractor's use in preparing its bid and Work under this Contract. The soils report is provided for review. Any information obtained from such report or any other information given on drawings as to subsurface soil condition or to elevations of existing grades or elevations of underlying rock is approximate only. If, during the course of Work under this Contract, Contractor encounters subsurface conditions which differ materially from those indicated in the soils investigation report, then Contractor shall notify the District within five (5) calendar days of discovery of the condition, and changes to the contract price may be made in accordance with Article 7 entitled "Changes in the Work." Contractor agrees that no claim against District will be made by Contractor for damages and hereby waives any rights to damages in the event the Contractor fails to notify District within the five-day period mentioned above.

WARNING: DISTRICT DOES NOT WARRANT THE SOILS AT THE PROJECT SITE. SOILS INVESTIGATION REPORT IS PROVIDED FOR CONTRACTORS INFORMATION ONLY. CONTRACTOR HAS CONDUCTED AN INDEPENDENT INVESTIGATION OF THE PROJECT SITE AND THE SOILS CONDITIONS OF THE SITE. DISTRICT DOES NOT WARRANT THE SOILS CONDITIONS OF THE SITE AND CONTRACTOR IS FULLY RESPONSIBLE TO ASCERTAIN SITE CONDITIONS FOR THE PURPOSES OF DETERMINING CONSTRUCTION MEANS AND METHODS PRIOR TO COMMENCING CONSTRUCTION. THE SOILS INVESTIGATION REPORT IS NOT A CONTRACT DOCUMENT.

2.1.4 Utilities.

2.1.4.1 *Regional Notification Center.* Contractor, except in an emergency, shall contact the appropriate regional notification center at least two working days prior to commencing any excavation if the excavation will be conducted in an area or in a private

easement which is known, or reasonably should be known, to contain subsurface installations other than the underground facilities owned or operated by the District, and obtain an inquiry identification number from that notification center. No excavation shall be commenced and carried out by the Contractor unless such an inquiry identification number has been assigned to the Contractor or any subcontractor of the Contractor and the District has been given the identification number by the Contractor. Any damages arising from failure to make appropriate regional notification shall be at the sole risk of Contractor. Any delays caused by failure to make appropriate regional notification shall be at the sole risk of Contractor and shall not be considered for extension of time pursuant to Paragraph 8.4.

2.1.4.2 Utilities – Removal and Restoration

The District has endeavored to determine the existence of utilities at the Site of the Work from the records of the District of known utilities in the vicinity of the Work. The positions of these utilities as derived from such records are shown in the Contract Documents.

No excavations were made to verify the locations shown for underground utilities. The service connections to these utilities may not be shown on the drawings. It shall be the responsibility of the Contractor to determine the exact location of all service connections. The Contractor shall make its own investigations, including exploratory excavations, to determine the locations and type of service connections, prior to commencing work which could result in damage to such utilities. The Contractor shall immediately notify the District's representative as to any utility discovered by Contractor in a different position than shown in the Contract Documents or which is not shown on the Contract Documents.

Contractor shall coordinate its Work with all utilities, including, but not limited to electricity, water, gas and telephone and meet with said utilities prior to the start of any work.

2.1.4.3 Other Utilities.

In case it should be necessary to remove, relocate, or temporarily maintain a utility because of interference with the Work, the work on the utility shall be performed and paid for as follows:

When it is necessary to remove, relocate or temporarily maintain a service connection, the cost of which is not required to be borne by the owner thereof, the Contractor shall bear all expenses incidental to the work on the service connection. The work on the service connection shall be done in a manner satisfactory to the owner thereof; it being understood that the owner of the service connection has the option of doing such work with his own forces or permitting the work to be done by the Contractor.

When it is necessary to remove, relocate, or temporarily maintain a utility which is in the position shown on the drawings, the cost of which is not required to be borne by the owner thereof, the Contractor shall bear all expenses incidental to the work on the utility. The work on the utility shall be done in a manner satisfactory to the owner thereof; it being understood that the owner of the utility has the option of doing such work with his own forces or permitting the work to be done by the Contractor.

When it is necessary to remove, relocate, or temporarily maintain a utility which is not shown on the drawings or is in a position different from that shown on the drawings and were it in the position shown on the drawings would not need to be removed, relocated, or temporarily maintained, and the cost of which is not required to be borne by the owner thereof, the District will make arrangements with

the owner of the utility for such work to be done at no cost to the Contractor, or will require the Contractor to do such work in accordance with Article 7 or will make changes in the alignment and grade of the Work to obviate the necessity to remove, relocate, or temporarily maintain the utility. Changes in alignment and grade will be ordered in accordance with Article 7 herein.

No representations are made that the obligations to move or temporarily maintain any utility and to pay the cost thereof is or is not required to be borne by the owner of such utility, and it shall be the responsibility of the Contractor to investigate to find out whether said cost is required to be borne by the owner of the utility.

The right is reserved to governmental agencies and to owners of utilities to enter at any time upon any street, alley, right-of-way, or easement for the purpose of making changes in their property made necessary by the Work and for the purpose of maintaining and making repairs to their property.

2.1.5 Existing Utility Lines; Removal, Relocation.

2.1.5.1 *Main or Trunkline Facilities*

If the Contractor while performing the contract discovers utility facilities not identified by the District in the Contract Documents, Contractor shall, within five (5) days, notify the District and utility in writing.

The District has the responsibility to identify, with reasonable accuracy, main or trunkline facilities on the drawings and specifications. In the event that main or trunkline utility facilities are not identified with reasonable accuracy in the drawings and specifications, District shall assume the responsibility for their timely removal, relocation, or protection.

The owner of the public utility shall have the sole discretion to perform repairs or relocation work or permit the Contractor to do such repairs or relocation work at a reasonable price.

The Contractor shall exercise reasonable care and shall be compensated by the District for the actual verified field costs of locating, and removing, relocating, protecting or temporarily maintaining such main or trunkline utility facilities not indicated with reasonable accuracy in the drawings and specifications, and for equipment in use on the project necessarily idled during such work. This work shall be performed in accordance with Article 7 of these General Conditions.

Alternatively, District may make changes in the alignment and grade of the work to obviate the need to remove, relocate, or temporarily maintain the utility, in accordance with Article 7 or District may make arrangements with the owner of the utility for such work to be done at no cost to the Contractor.

The Contractor shall not be assessed a forfeiture for delay in completion of the Project when such delay is caused by the failure of the District or the owner of the utility to provide for the removal, relocation, protection or temporary maintenance of all such main or trunkline facilities not indicated with reasonable accuracy.

Nothing herein shall preclude the District from pursuing any appropriate remedy against the utility for delays which are the responsibility of the utility.

Nothing herein shall be construed to relieve the utility from any obligation as required either by law or by contract to pay the cost of removal or relocation of existing utility facilities.

2.1.5.2 *Assessment.* These subparagraphs shall not be construed to preclude assessment against the Contractor for any other delays in completion of the Work. Nothing in these subparagraphs shall be deemed to require the District to indicate the presence of existing service laterals or appurtenances whenever the presence of such utilities on the Site can be inferred from the presence of other visible facilities, such as buildings, or meter junction boxes on or adjacent to the Site.

2.1.5.3 *Notification.* If the Contractor, while performing Work under this Contract, discovers utility facilities not identified by the District in the Contract Documents, Contractor shall, within five (5) days, notify the District and the utility in writing. If Contractor fails to notify the District within five (5) days after discovery of any utility facilities not identified by District in the Contract Documents, Contractor waives all rights to be compensated for any extra Work or damages resulting from such discovered utilities.

2.1.6 Easements.

District shall secure and pay for easements for permanent structures or permanent changes in existing facilities, if any, unless otherwise specified in the Contract Documents.

2.2 **DISTRICT'S RIGHT TO CARRY OUT THE WORK**

If the Contractor defaults or neglects to carry out the Work in accordance with the Contract Documents, including, but not limited to:

1. Failure to supply adequate workers on the entire Project or any part thereof;
2. Failure to supply a sufficient quantity of materials;
3. Failure to perform any provision of this Contract;
4. Failure to comply with safety requirements, or due to Contractor is creation of an unsafe condition;
5. In the case of bona fide emergency;
6. Failure to order materials in a timely manner;
7. Failure to prepare deferred-approval items or shop drawings in a timely manner;
8. Failure to comply with Contractor's schedule which would result in a delay to the critical path;
9. Failure to comply with the Subletting and Subcontracting Fair Practices, Public Contract Code section 4100, et seq.

If the Contractor defaults or neglects to carry out the Work in accordance with the Contract Documents, and fails (within a five-day period after receipt of written notice or a shorter time period expressly stated in the written notice from the District in an emergency situation) to commence and continue correction of such default with diligence and promptness, the District may correct such deficiencies without prejudice to other remedies the District may have, including those set forth in Article 14 after providing five-day written notice to Contractor and Surety. If during this five (5) day period, Surety personally delivers notice to District that it intends to perform such work, District shall allow Surety seven (7) days to perform. In an emergency situation, the District may correct such deficiencies without

prejudice to other remedies the District may have, including those set forth in Article 14 after providing 48 hours' notice to the Contractor. In either case, the Contractor will be invoiced the cost of correcting such deficiencies, including compensation for additional services and expenses made necessary by such default, or neglect. The invoice amount shall be deducted from the next payment due the Contractor. If payments then or thereafter due the Contractor are not sufficient to cover such amounts, the Contractor shall pay the difference to the District.

ARTICLE 3

THE CONTRACTOR

3.1 SUPERVISION AND CONSTRUCTION PROCEDURES

3.1.1 Contractor.

The Contractor shall continually supervise and direct the Work using the Contractor's best skill and attention. The Contractor shall be solely responsible for and have control over construction means, methods, techniques, sequences, procedures; and shall coordinate all portions of the Work under the Contract, unless the Contract Documents give other specific instructions concerning these matters. The Contractor shall not perform the Work without utilizing the Contract Documents or, where required, approved shop drawings, product data, or samples for any such portion of the work. If any of the Work is performed by contractors retained directly by the District, Contractor shall be responsible for the coordination and sequencing of the work of those other contractors so as to avoid any impact on the project schedule pursuant to the requirements of Article 6 and Article 8. Specific duties of the Contractor shall include those set out in Section 43 of Title 21 of the California Code of Regulations and Section 4-343 of Title 24 of the California Code of Regulations. These duties include, but are not limited to the following:

(a) Responsibilities. It is the duty of the Contractor to complete the Work covered by his or her contract in accordance with the approved drawings and specifications. The Contractor in no way is relieved of any responsibility by the activities of the Architect, Engineer, Inspector or DSA in the performance of their duties.

(b) Performance of the work. The Contractor shall carefully study the approved drawings and specifications and shall plan its schedule of operations well ahead of time. If at any time it is discovered that work is being done which is not in accordance with the approved drawings and specifications, the contractor shall correct the work immediately.

All inconsistencies or times which appear to be in error in the drawings and specifications shall promptly be called to the attention of the Architect or, Engineer, for interpretation or correction. Local conditions which may affect the structure shall be brought to the Architect's attention at once. In no case, shall the instruction of the Architect be construed to cause work to be done which is not in conformity with the approved drawings, specifications, change orders, construction change directives, and as required by law.

The Contractor shall not carry on Work except with the knowledge of the Inspector of Record.

(c) Verified Reports. The Contractor shall make and submit to the District from time to time, verified reports as required in Section 36 of Title 21 and Section 4-366 of Title 24.

Contractor shall fully comply with any and all reporting requirements of Education Code Sections 81147, et seq., in the manner prescribed by Title 24, as applicable.

3.1.2 Contractor Responsibility.

The Contractor shall be responsible to the District for acts and omissions of the Contractor's employees, Subcontractors, material and equipment suppliers, and their agents, employees, invitees, and other persons performing portions of the Work under direct or indirect contract with the Contractor or any of its Subcontractors.

3.1.3 Obligations not Changed by Architect's Actions.

The Contractor shall not be relieved of obligations to perform the Work in accordance with the Contract Documents either by activities or duties of the Architect in the Architect's administration of the Contract or by tests, inspections, or approvals required or performed by persons other than the Contractor.

3.1.4 Acceptance/Approval of Work.

The Contractor shall be responsible to determine when any completed portions of the Work already performed under this Contract or provided pursuant to Article 6 are suitable to receive subsequent Work thereon.

3.1.5 Performance of Work With Own Force.

Contractor shall perform at least 15% of the Work, exclusive of supervisory and clerical work without the services of any subcontractor. Contractor shall supervise and direct the work competently and efficiently, devoting such attention thereto and applying such skills as may be necessary to perform the Work in accordance with the Contract Documents.

3.2 SUPERVISION

3.2.1 Full Time Supervision.

Unless personally present on the Project site where the Work is being performed, the Contractor shall keep on the Work at all times during its progress a competent construction Superintendent satisfactory to the District. The Superintendent shall be present on a full-time basis, shall be dedicated exclusively to the Project and shall not share superintendence duties with another project or job. The Superintendent shall not be replaced except with written consent of the District. The Superintendent shall represent the Contractor in its absence and shall be fully authorized to receive and fulfill any instruction from the Architect, the Inspector, the District or any other District representative. All Requests for Information shall be originated by the Superintendent and responses thereto shall be given to the

Superintendent. No Work shall begin on any day by any Subcontractor or other person on the Project site until the Superintendent has arrived, or shall any Work continue during the day after the Superintendent has departed from the Project site. The Superintendent shall have authority to bind Contractor through the Superintendent's acts. The Superintendent shall represent the Contractor, and communications given to the Superintendent shall be binding on the Contractor. Before commencing the Work, Contractor shall give written notice to District and Architect of the name and a Statement of Qualifications of such superintendent for District approval. Superintendent shall not be changed except with written consent of District, unless a superintendent proves to be unsatisfactory to Contractor and ceases to be in its employ, in which case, Contractor shall notify District and Architect in writing. Contractor shall provide a replacement superintendent approved by the District prior to performing additional work.

3.2.2 Staff.

Notwithstanding other requirements of the contract documents, the Contractor and each Subcontractor shall: (1) furnish a competent and adequate staff as necessary for the proper administration, coordination, supervision, and superintendence of its portion of the Work; (2) organize the procurement of all materials and equipment so that the materials and equipment will be available at the time they are needed for the Work; and (3) keep an adequate force of skilled and fit workers on the job to complete the Work in accordance with all requirements of the Contract Documents.

3.2.3 Right to Remove.

District shall have the right, but not the obligation, to require the removal from the Project of any superintendent, staff member, agent, or employee of any Contractor, Subcontractor, material or equipment supplier.

3.3 LABOR AND MATERIALS

3.3.1 Contractor to Provide.

Unless otherwise provided in the Contract Documents, the Contractor shall provide and pay for labor, material, equipment, tools, construction equipment and machinery, water, heat, air conditioning, utilities, transportation, and other facilities, services and permits necessary for proper execution and completion of the Work whether temporary or permanent and whether or not incorporated or to be incorporated in the Work.

3.3.2 Quality.

Unless otherwise specified, all materials and equipment to be permanently installed in the Project shall be new and shall be of the highest quality or as specifically stated in the Contract Documents. The Contractor shall, if requested, furnish satisfactory evidence as to kind and quality of all materials and equipment within ten (10) days of a written request by the District, including furnishing the District with bona fide copies of invoices for materials or services provided on the Project. All labor shall be performed by workers skilled in their respective trades, and shall be of the same or higher quality as with the standards of other school construction.

3.3.3 Replacement.

Any work, materials, or equipment, which do not conform to these requirements or the standards set forth in the Contract Documents, may be disapproved by the District, in which case, they shall be removed and replaced by the Contractor at no additional cost or extension of time to the District.

3.3.4 Discipline.

The Contractor shall enforce strict discipline and good order among the Contractor's and Subcontractor's employees, and other persons carrying out the Contract. The Contractor shall not permit employment of unfit persons or persons not skilled in tasks assigned to them. As used in this subsection, "unfit" includes any person who the District concludes is improperly skilled for the task assigned to that person, who fails to comply with the requirements of this article, or who creates safety hazards which jeopardize other persons and/or property.

3.3.5 Noise, Drugs, Tobacco, and Alcohol.

Contractor shall take all steps necessary to insure that employees of Contractor or any of its subcontractors' employees do not use, consume, or work under the influence of any alcohol, tobacco or illegal drugs while on the project. Contractor shall further prevent any of its employees or its subcontractor employees from playing any recorded music devices or radios or wearing any radio headphone devices for entertainment while working on the project. Likewise, Contractor shall prevent its employees or subcontractor's employees from bringing any animal onto the project. Contractors shall not violate any written school policies.

3.3.6 Delivery of Material.

Contractor shall place orders for materials or equipment so that the Work may be completed in accordance with the Construction schedule for the Work as set forth in Article 8 of this Agreement. Contractor shall, upon demand from the Architect, furnish to the Architect documentary evidence including, but not limited to purchase orders, invoices, bills of materials, work orders and bills of lading, showing that orders have been placed.

3.3.7 Liens and Other Security Interests of Subcontractors and Material Suppliers.

No material, supplies, or equipment for the Work shall be purchased subject to any chattel mortgage or under a conditional sale or other agreement by which an interest therein or in any part thereof is retained by seller or supplier. Contractor warrants good title to all material, supplies, and equipment installed or incorporated in Work and agrees upon completion of all Work to deliver premises, together with all improvements and appurtenances constructed or placed thereon by it, to District free from any claims, security interests, liens, or charges. Contractor further agrees that neither it nor any person, firm, or corporation furnishing any materials or labor for any Work covered by this Contract shall have any right to place a lien upon the premises or any improvement or appurtenance thereof, except that Contractor may install metering devices or other equipment of a utility company or political subdivision, title to which is commonly retained by the utility company or political subdivision. In event of installation of any such metering device or equipment, Contractor shall advise District as to its owner within five (5) days of such installation in writing, prior to making the installation.

3.3.8 Title to Materials.

The title to new materials or equipment for the Work of this Contract, and attendant liability for its protection and safety, shall remain with Contractor until incorporated in the Work of this Contract and accepted by the District and Architect; no part of said materials shall be removed from its place of storage, and Contractor shall keep an accurate inventory of all said materials and equipment in a manner satisfactory to the District or its authorized representative.

3.3.9 Assemblies.

For all material and equipment specified or indicated in the Drawings, the Contractor shall provide all labor, materials, equipment, and services necessary for complete assemblies and complete working systems. Incidental items not indicated on the Drawings, nor mentioned in the Specifications, that can legitimately and reasonably be inferred to belong to the Work described, or be necessary in good practice to provide a complete assembly or system, shall be furnished as though itemized in the Contract Documents in every detail. In all instances, material and equipment shall be installed in strict accordance with each manufacturer's most recent published recommendations and specifications.

3.4 **WARRANTY**

3.4.1 The Contractor warrants to the District that material and equipment furnished under the Contract will be of the highest quality and new unless otherwise required or permitted by the Contract Documents, that the Work will be free from defects not inherent in the quality required or permitted, and that the Work will conform with the requirements of the Contract Documents. Work not conforming to these requirements, including substitutions not properly approved and authorized, may be considered defective. Contractor's warranty and guaranty to District includes, but is not limited to the following representations:

3.4.1.1 In addition to any other warranties and guaranties provided elsewhere, Contractor shall, and hereby does, warrant all Work after the date of Notice of Completion of Work by District and shall repair or replace any or all such work, together with any other work, which may be displaced in so doing that may prove defective in workmanship or materials within a one (1) year period from date of completion as defined in Public Contract Code Section 7107(c) without expense whatsoever to District, ordinary wear and tear, unusual abuse or neglect excepted. District will give notice of observed defects with reasonable promptness. Contractor shall notify District upon completion of repairs.

3.4.1.2 In the event of failure of Contractor to comply with above mentioned conditions within one week after being notified in writing, District is hereby authorized to proceed to have defects repaired and made good at expense of Contractor who hereby agrees to pay costs and charges therefore immediately on demand.

3.4.1.3 If, in the opinion of the District, defective Work creates a dangerous condition or requires immediate correction or attention to prevent further loss to the District, the District will attempt to give the notice required by this Article. If the Contractor cannot be contacted or does not comply with the District's requirements for correction within a reasonable time as determined by the District, the District may, notwithstanding the provisions of this article, proceed to make such correction or

attention which shall be charged against Contractor. Such action by the District will not relieve the Contractor of the guarantee provided in this Article or elsewhere in this Contract.

3.4.1.4 This Article does not in any way limit the guarantee on any items for which a longer warranty or guaranty is specified or on any items for which a manufacturer gives a guarantee for a longer period. Contractor shall furnish District all appropriate guaranty or warranty certificates upon completion of the project.

3.4.2 Format - All Warranties/Guaranties and shall include:

3.4.2.1 Contractor, subcontractor, and equipment supplier shall provide Warranties and Guaranties on their original company letterhead with original signature.

3.4.2.2 Contractor shall provide original Warranties and Guaranties. Photo copies, fax and e-mail copies are not acceptable.

3.4.3 Preparation

3.4.3.1 Contractor shall obtain warranties and guaranties, executed in duplicate by each applicable and/or responsible subcontractor(s), supplier(s), and manufacturer(s), within fifteen (15) days after Notice of Substantial Completion of the applicable Work or Phase of Work. Except for items put into use with District's permission, Contractor shall leave date of beginning of time of warranty or guaranty blank until the date of completion is determined by District.

3.4.3.2 Contractor's Response to Construction Warranty and Guaranty Service Requirements: Following oral or written notification by the District, respond to construction warranty and guaranty service requirements within 24 hours, or earlier in case of emergency.

3.4.4 Warranty and/or Guaranty Tags.

At the time of installation of mechanical equipment or other major system elements, tag each warranted or guaranteed item with a durable, oil and water resistant tag approved by the District. Attached each tag with a copper wire and spray with a silicone waterproof coating. The date of Substantial Completion and the Contractor Authorized signature must remain blank until the date the District makes a determination of Substantial Completion. Show the following information on the tag:

WARRANTY/GUARANTY INFORMATION – [insert project number and name on actual tag]

- a. Type of product/material _____.
- b. Model number _____.
- c. Serial number _____.
- d. Contract number _____.
- e. Warranty/Guaranty period _____ (months) from _____ to _____.
- f. Inspector's signature _____.
- g. Construction Contractor _____.
Address _____.

- Telephone number _____.
- h. Warranty or Guaranty contact _____.
- Address _____.
- Telephone number _____.
- j. WARNING - PROJECT PERSONNEL TO PERFORM ONLY OPERATIONAL MAINTENANCE DURING THE WARRANTY PERIOD.

3.5 TAXES

Contractor will pay all applicable Federal, State, and local taxes on all materials, labor, or services furnished by it, and all taxes arising out of its operations under the Contract Documents. District is exempt from Federal Excise Tax, and a Certificate of Exemption shall be provided upon request.

3.6 PERMITS, FEES AND NOTICES

3.6.1 Payment.

The Contractor shall secure and pay for all permits and governmental fees, licenses, and inspections necessary for proper execution and completion of the Work which are necessary after execution of the Contract and are legally required by any authority having jurisdiction over the Project, except those required by the Division of the State Architect (DSA). District shall be responsible for all testing and inspection as required by the DSA on-site or within the distance limitations set forth in Paragraph 13.5.2.

3.6.2 Compliance.

The Contractor shall comply with and give notices required by any law, ordinance, rule, regulation, and lawful order of public authorities bearing on performance of the Work.

3.6.3 Responsibility.

The Contractor shall perform all Work in conformance with every applicable law, statute, ordinance, building code, rule or regulation. The Contractor shall assume full responsibility for such Work and shall bear the attributable cost of correction or project delay.

3.7 Not used.

3.8 CONTRACTOR'S CONSTRUCTION SCHEDULES

3.8.1 Requirements.

- (a) Within ten (10) calendar days after being awarded the contract, Contractor shall submit a schedule for District's approval using Microsoft Project, or Oracle Primavera software Contractor shall provide digital schedule files to District on CD for this schedule, and all subsequent progress schedules required by the District. The schedule shall not exceed time limits set forth in the Contract Documents and shall comply with all of the scheduling requirements as set forth in the Specifications.

Failure to submit a schedule or submittal of a schedule which shows completion of the Work beyond the specified completion date shall be deemed a material breach by the Contractor. The schedule must indicate the beginning and completion of all phases of construction and shall use the "critical path method" (commonly called CPM) for the value reporting, planning and scheduling, of all Work required under the Contract Documents. The scheduling is necessary for the District's adequate monitoring of the progress of the Work and shall be prepared in accordance with the time frame described in Article 8 of the General Conditions. The District may disapprove of any schedule or require modification to it if, in the opinion of the District, adherence to the progress schedule will not cause the Work to be completed in accordance with the Agreement.

(b) Contractor shall not submit a schedule showing early completion without indicating float time through the date set for Project completion by District. Contractor's schedule shall account for all days past early completion as float which belongs to both District and Contractor. Usage of float shall not entitle Contractor to any delay claim or damages due to delay.

(c) Contractor shall not be granted an extension of time for failure to obtain necessary approvals for deferral approvals due to failure to comply with laws, building codes, and other regulations (including Title 24 of the California Code of Regulations). Contractor shall schedule all deferred approval items and shop drawings in its progress schedule. If Contractor fails to include deferred approval items and shop drawings in its schedule which results in a critical path delay, then Contractor shall be subject to the assessment of liquidated damages.

(d) In addition to providing a schedule update every thirty (30) days, the Contractor, if requested by the Architect or District, shall provide revised schedules within ten (10) days if, at any time, the Architect or District, consider the completion date to be in jeopardy because of "activities behind schedule." The additional schedule shall include a new arrow or precedence diagram and schedule reports conforming to the requirements above, designed to show how the Contractor intends to accomplish the Work to meet the completion date. The form and method employed by the Contractor shall be the same as for the original construction schedule accepted by the District. The Contractor shall modify any portions of the schedule that become infeasible because of "activities behind schedule" or for any other valid reason. An activity that cannot be completed by its original latest completion date shall be deemed to be behind schedule. If Contractor submits a revised schedule showing an earlier completion date for the Project, District's acceptance of this revised schedule shall not entitle Contractor to any delay claim or damages due to any such revised schedule.

(e) Contractor shall include in the schedule all shop drawings, and deferred submittals. Include activities for the submittal, District/Architect's review (minimum duration of 14 calendar days), procurement (or fabrication as applicable); and link the finish of the procurement/fabrication activity to the start of the related field activity at the Site.

3.8.2 Failure to Meet Requirements.

Failure of the Contractor to provide proper schedules as required by this Article and Article 9 is a material breach of the contract and grounds for termination pursuant to Article 14. The District, at its sole discretion, may choose, instead, to withhold, in whole or in part, any progress payments or retention amounts otherwise payable to the Contractor.

3.9 Not used.

3.10 DOCUMENTS AND SAMPLES AT THE SITE

The Contractor shall maintain at the Site for the District one current copy of the International Building Code, Titles 19, 21 and 24 of the California Code of Regulations and one record copy of the Drawings, Specifications, Addenda, Change Orders, and other Modifications, in good order and marked currently to record changes and selections made during construction. In addition, the Contractor shall maintain at the Site approved Shop Drawings, Product Data, Samples, and similar required submittals. These documents shall be available to the District, and shall be delivered to the District upon completion of the Work.

3.11 SHOP DRAWINGS, PRODUCT DATA, SAMPLES, AND SUBSTITUTIONS

3.11.1 Submittals defined.

3.11.1.1 *Shop Drawings.* The term “shop drawings” as used herein means drawings, diagrams, schedules, and other data, which are prepared by Contractor, Subcontractors, manufacturers, suppliers, or distributors illustrating some portion of the Work, and includes: illustrations; fabrication, erection, layout and setting drawings; manufacturer’s standard drawings; schedules; descriptive literature, instructions, catalogs, and brochures; performance and test data including charts; wiring and control diagrams; and all other drawings and descriptive data pertaining to materials, equipment, piping, duct and conduit systems, and methods of construction as may be required to show that the materials, equipment, or systems and their position conform to the requirements of the Contract Documents. The Contractor shall obtain and submit with shop drawings all seismic and other calculations and all product data from equipment manufacturers. “Product data” as used herein are illustrations, standard schedules, performance charts, instructions, brochures, diagrams, and other information furnished by the Contractor to illustrate a material, product, or system for some portion of the Work. As used herein, the term “manufactured” applies to standard units usually mass-produced, and “fabricated” means items specifically assembled or made out of selected materials to meet individual design requirements. Shop drawings shall: establish the actual detail of all manufactured or fabricated items, indicate proper relation to adjoining work, amplify design details of mechanical and electrical systems and equipment in proper relation to physical spaces in the structure, and incorporate minor changes of design or construction to suit actual conditions.

3.11.1.2 *Samples.* The term “samples” as used herein are physical examples furnished by Contractor to illustrate materials, equipment, or quality and includes natural materials, fabricated items, equipment, devices, appliances, or parts thereof as called for in the Specifications, and any other samples as may be required by the District/Architect to determine whether the kind, quality, construction, finish, color, and other characteristics of the materials, etc., proposed by the Contractor conform to the required

characteristics of the various parts of the Work. All Work shall be in accordance with the approved samples.

3.11.1.3 *Contractor's Responsibilities.* Contractor shall obtain and shall submit all required shop drawings, samples, etc., required by the Specifications with such promptness as to cause no delay in its own Work or in that of any other contractor or subcontractor but in no event later than ten (10) days after the award of the Contract. No extensions of time will be granted to Contractor or any Subcontractor because of its failure to have shop drawings and samples submitted in accordance with the Schedule. Each Subcontractor shall submit all shop drawings, samples, and manufacturer's descriptive data for the review of the District, the Contractor, and the Architect through the Contractor. By submitting shop drawings, product data, samples, etc., the Contractor represents that it has determined and verified all materials, field measurements, catalog numbers, related field construction criteria, and other relevant data in connection with each such submission, and that it has checked, verified, and coordinated the information contained within such submittals with the requirements of the Work and of the Contract Documents, including the construction schedule. The submission of the shop drawings, product data, samples, etc., shall not deviate from the requirements of the Contract Documents including detailing and design intent which is specifically outlined in Contract Documents except as specifically authorized by the District/Architect or through an accepted substitution pursuant to Paragraph 3.10.4. All deviations from the Contract Documents shall be narratively described in a transmittal accompanying the shop drawings. However, shop drawings shall not be used as a means of requesting a substitution, the procedure for which is defined in Paragraph 3.10.4, "Substitutions." Review by District and Architect shall not relieve the Contractor or any Subcontractor from its responsibility in preparing and submitting proper shop drawings in accordance with the Contract Documents. Any submission, which in District/Architect's opinion is incomplete, contains errors, or has been checked superficially will be returned un-reviewed by the District/Architect for resubmission by the Contractor. Contractor shall stamp, sign, and date each submittal indicating its representation that the submittal meets all of the requirements of the Contract Documents and evidence Contractor's review through execution of the following stamp to be placed on each shop drawings:

"The contractor has reviewed and approved the field dimensions and the construction criteria, and has also made written notation regarding any information in the shop drawings that does not conform to the contract documents. This shop drawing has been coordinated with all other shop drawings received to date by contractor and this duty of coordination has not been delegated to subcontractors, material suppliers, the Architect, or the engineers on this project.

Signature of Contractor and date"

3.11.1.4 *Extent of Review.* In reviewing shop drawings, the District nor the Architect will not verify dimensions and field conditions. The Architect will review and approve shop drawings, product data, samples, etc., for aesthetics and for conformance with the design concept of the Work and the information in the Contract Documents. The District nor the Architect's review shall neither be construed as a complete check which relieves the Contractor, Subcontractor, manufacturer, fabricator, or supplier from responsibility for any deficiency that may exist or from any departures or deviations from the requirements of the Contract Documents unless the Contractor has, in writing, called the District's/Architect's attention to the deviations at the time of submission. The District's or Architect's review shall not relieve the Contractor or Subcontractors from responsibility for errors of any sort in shop drawings or schedules, for proper fitting of the Work, coordination of the differing subcontractor trades

and shop drawings and Work which is not indicated on the shop drawings at the time of submission of shop drawings. Contractor and Subcontractors shall be solely responsible for any quantities which may be shown on the submittals or Contract Documents.

3.11.2 Drawing Submission Procedure.

3.11.2.1 *Transmittal Letter and Other Requirements.* All shop drawings must be properly identified with the name of the Project and dated, and each lot submitted must be accompanied by a letter of transmittal referring to the name of the Project and to the Specification section number for identification of each item clearly stating in narrative form, as well as "clouding" on the submissions, all qualifications, departures, or deviations from the Contract Documents. Shop drawings, for each section of the Work shall be numbered consecutively and the numbering system shall be retained throughout all revisions. All Subcontractor submissions shall be made through the Contractor. Each drawing shall have a clear space for the stamps of Architect and Contractor.

3.11.2.2 *Copies Required.* Unless otherwise approved by the District, each submittal shall include six (6) legible prints of each drawing or schedule, table, cut sheet, etc., including fabrication, erection, layout and setting drawings, and such other drawings as required under the various sections of the Specifications, until final acceptance thereof is obtained. Subcontractor shall submit copies, in an amount as requested by the Contractor, of: (1) manufacturers' descriptive data for materials, equipment, and fixtures, including catalog sheets showing dimensions, performance, characteristics, and capacities; (2) wiring diagrams and controls; (3) schedules; (4) all seismic calculations and other calculations; and (5) other pertinent information as required by the District or Architect..

3.11.2.3 *Corrections.* The Contractor shall make all corrections required by District/Architect and shall resubmit, as required by District/Architect, corrected copies of shop drawings or new samples until approved. Contractor shall direct specific attention in writing or on resubmitted shop drawings to revisions other than the corrections required by the District/Architect on previous submissions. Professional services required for more than one (1) re-review of required submittals of shop drawings, product data, or samples are subject to charge to the Contractor pursuant to Paragraph 4.4.

3.11.2.4 *Approval Prior to Commencement of Work.* No portion of the Work requiring a shop drawing or sample submission or other submittal shall be commenced until the submission has been reviewed by Contractor and Architect and approved by Architect unless specifically directed in writing by the District. All such portions of the Work shall be in accordance with approved shop drawings and samples.

3.11.3 Sample Submissions Procedure.

3.11.3.1 *Samples Required.* In case a considerable range of color, graining, texture, or other characteristics are anticipated in finished products, a sufficient number of samples of the specified materials shall be furnished by the Contractor to indicate the full range of characteristics which will be present in the finished products; and products delivered or erected without submittal and approval of a full range of samples shall be subject to rejection. Except for range samples, and unless otherwise called for in the various sections of the Specifications, samples shall be submitted in duplicate. All samples shall be marked, tagged, or otherwise properly identified with the name of the submitting party, the name of the Project, the purpose for which the samples are submitted and the date, and shall be accompanied by a letter of transmittal containing similar information, together with the Specification section number. Each tag or sticker shall have clear space for the review stamps of Contractor and Architect.

3.11.3.2 *Labels and Instructions.* All samples of materials shall be supplied with the manufacturer's descriptive labels and application instructions.

3.11.3.3 *Architect's Review.* The Architect will review and, if appropriate, approve submissions and will return them to the Contractor with the Architect's stamp and signature applied thereto, indicating the timing for review and appropriate action in compliance with the Architect's (or District's) standard procedures.

3.11.3.4 *Not used.*

3.11.3.5 *Not used.*

3.11.3.6 *District's Property.* All shop drawings, computer disks, annotated specifications, samples and other submittals shall become the District's property upon receipt by the District or Architect.

3.11.4 Substitutions.

3.11.4.1 *One Product Specified.* Unless the Specifications state that no substitution is permitted, whenever the Contract Documents indicate any specific material, product, thing or service, or any specific name, make, trade name, or catalog number, with or without the words "or equal," such specification shall be deemed to be used for the purpose of facilitating description of the material, product, thing or service desired and shall be deemed to be followed by the words "or equal" unless the Contract Documents specify "no substitution allowed", "no equal", "no equivalent", or other language with similar meaning, in which case no substitutions will be allowed. Pursuant to Paragraph 3.11.4.3, the Contractor may, unless otherwise stated, within three (3) work days after the bid opening, submit a substitution request for any material, product, thing or service, which shall be materially equal or better in every respect to that so indicated or specified ("Specified Item") and will completely accomplish the purpose of the Contract Documents.

(a) *Products Specified Which are Commercially Unavailable.* If the Contractor fails to make a request for substitutions for products, within three (3) work days after bid opening, and such products subsequently become commercially unavailable, the Contractor may request a substitution for such commercially unavailable item. The decision to grant this request is solely at the District's discretion. The written approval of the District, consistent with the procedure for Change Orders, shall be required for the use of a proposed substitute material. The District may condition its approval of the substitution upon the delivery to District of an extended warranty or guaranty or other assurances of adequate performance of the substitution as well as an equitable deduction in the contract sum should the substituted item cost less than the Specified Item. All risks of delay due the approval of a requested substitution by the District, DSA, or any other governmental agency having jurisdiction, shall be on the requesting party. All additional costs, all procurement and construction delays, and all costs for review by the Architect or its consultants shall be the responsibility of the Contractor and will be deducted from Contractor's pay request.

3.11.4.2 *Substitution Request Form.* Requests for substitutions of materials, products, things or services in place of a Specified Item must be submitted to the District in writing on the District's Substitution Request Form ("Request Form") within three (3) work days after bid opening, except as provided for in Paragraph 3.11.4.1. (a *Substitution Request Form* is included at the end of this document; or may be obtained from the District.)

The Request Form must be accompanied by evidence as to whether the proposed substitution:

1. Is equal in quality/service/ability to the Specified Item;
2. Will entail no changes in detail, construction, and scheduling of related work;
3. Will be acceptable in consideration of the required design and artistic effect;
4. Will provide no cost disadvantage to the District;
5. Will require no excessive or more expensive maintenance, including adequacy and availability of replacement parts; and
6. Will required no change of the construction schedule.

3.11.4.3 In completing the Request Form, the bidder shall state, with respect to each requested substitution, that the bidder will agree to provide the Specified Item in the event that the District denies the bidder's request for such requested substitution. In the event the District denies the bidder's requested substitution for a Specified Item, the bidder shall provide the Specified Item without any additional cost or charge to the District, and waives all rights to submit a claim.

3.11.4.4 After bids are opened, the apparent lowest bidder shall provide, within three (3) days of opening such bids, any and all Drawing, Specifications, samples, performance data, calculations, and other information, as may be required to assist the Architect and the District in determining whether the proposed substitution is acceptable. The burden of establishing these facts shall be upon the bidder.

3.11.4.5 After the District's receipt of such evidence by the bidder, the District will make its final decision as to whether the bidder's request for substitution for any Specified Items will be granted. The decision as to whether a proposed request for substitution is equal to a Specified Item shall be at the sole discretion of the District. Any request for substitution that is granted by the District shall be documented and processed through a Change Order. The District may condition its approval of any substitution upon delivery to the District of an extended warranty or guaranty or other assurances of adequate performance of the substitution. Any and all risks of delay due to approval by the District, DSA or any other governmental agency having jurisdiction shall be on the bidder.

3.11.4.6 If the Architect and District accept a proposed substitution, the Contractor agrees to pay for all District expenses, including but not limited to Division of the State Architect fees, engineering and design services, compensation to the Architect and affected engineers for their required time to process such substitution through the Division of the State Architect, if required, and to make all changes and adjustments in materials or the work of all trades directly or indirectly affected by the substituted item or items at no cost to the District.

3.12 INTEGRATION OF WORK

3.12.1 Scope.

The Contractor shall be responsible for cutting, fitting, or patching to complete the Work and to make all parts fit together properly. Contractor shall be responsible for ensuring that all trades are coordinated and scheduled so as to ensure the timely and proper execution of the work. When modifying existing work or installing new Work adjacent to existing work, Contractor shall match, as closely as conditions of Site and materials will allow, the finishes, textures, and colors of the original work, refinishing existing work at no additional cost to District. All cost caused by defective or ill-timed work shall be borne by Contractor. Contractor shall be solely responsible for protecting existing work on adjacent properties and shall obtain all required permits for shoring and excavations near property lines.

3.12.2 Structural Members.

New or existing structural members and elements, including reinforcing bars and seismic bracing, shall not be cut, bored, or drilled except by written authority of the Architect and DSA. Work done contrary to such authority is at the Contractor's risk and subject to replacement at its own expense without reimbursement under the Contract. Schedule delays resulting from unauthorized work shall be the Contractor's responsibility.

3.12.3 Subsequent Removal.

Permission to patch any areas or items of the Work shall not constitute a waiver of the District's or the Architect's right to require complete removal and replacement of the areas or items of the Work if, in the opinion of the Architect or the District, the patching does not satisfactorily restore quality and appearance of the Work or does not otherwise conform to the Contract Documents.

3.13 CLEANING UP

3.13.1 Contractor's Responsibility.

Contractor at all times shall keep premises free from debris such as waste, dust, excess water, storm water runoffs, rubbish, and excess materials and equipment. Contractor shall not leave debris under, in, or about the premises, but shall promptly remove same from the premises and dispose of it in a lawful manner. Disposal receipts or dump tickets shall be furnished to the Architect within five (5) days of request. Upon completion of Work, Contractor shall clean interior and exterior of buildings, including fixtures, equipment, walls, floors, ceilings, roofs, window sills and ledges, horizontal projections, and any areas where debris has collected, so surfaces are free from foreign material or discoloration; Contractor shall clean and polish all glass, plumbing fixtures, equipment, finish hardware and similar finish surfaces. Upon completion of the Work, Contractor shall also remove temporary utilities, fencing, barricades, planking, sanitary facilities and similar temporary facilities from Site.

Contractor shall remove rubbish and debris resulting from the Work on a daily basis. Contractor shall maintain the structures and Site in a clean and orderly condition at all times until acceptance of the project by the District. Contractor shall keep its access driveways and adjacent streets, sidewalks, gutters and drains free of rubbish, debris and excess water by cleaning and removal each day.

3.13.1.1 In addition to the general cleaning, the following special cleaning shall be done at the completion of the work in accordance with the specifications including, but not limited to:

- (a) Remove putty stains from glazing, then wash and polish glazing.
- (b) Remove marks, stains, fingerprints and other soil or dirt from painted, stained or decorated work.
- (c) Remove temporary protection and clean and polish floors and waxed surfaces.
- (d) Clean and polish hardware and plumbing trim; remove stains, dust, dirt, plaster and paint.
- (e) Remove spots, soil, plaster and paint from tile work, and wash tile.
- (f) Clean all fixtures and equipment, remove excess lubrication, clean light fixtures and lamps, polish metal surfaces.

- (g) Vacuum-clean carpeted surfaces.
- (h) Remove debris from roofs, down spout and drainage system.

3.13.2 Failure to Cleanup.

If the Contractor fails to clean up as provided in the Contract Documents, the District may do so, and the cost thereof shall be the responsibility of the Contractor and deducted from the next progress payment.

3.14 ACCESS TO WORK

The Contractor shall provide the District, the Architect, Engineers and the Inspector of Record, access to the Work in preparation and progress wherever located. Contractor shall provide safe and proper facilities for such access so that District's representatives may perform their functions.

CONTRACTOR IS AWARE THAT THIS CONTRACT MAY BE SPLIT INTO SEVERAL PHASES AS ADDRESSED IN ARTICLE 6.

3.15 ROYALTIES AND PATENTS

3.15.1 Payment and indemnity for Infringement.

Contractor shall hold and save the District and its officers, agents, and employees, the Architect, and the Architect's consultants harmless from liability of any nature or kind, including cost and expense, for or on account of any patented or unpatented invention, process, article, or appliance manufactured or used in the performance of the contract, including its use by the District, unless otherwise specifically provided in the contract documents, and unless such liability arises from the sole negligence, or active negligence, or willful misconduct of the District, the Architect, or the Architect's consultants.

3.15.2 Review.

The review by the Architect of any method of construction, invention, appliance, process, article, device, or material of any kind shall be for its adequacy for the Work and shall not be an approval for the use by the Contractor in violation of any patent or other rights of any person or entity.

3.16 INDEMNIFICATION

3.16.1 Contractor.

Contractor shall defend, indemnify and hold harmless District, Architect, Inspector, the State of California and their officers, employees, agents and independent contractors from all liabilities, claims, actions, liens, judgments, demands, damages, losses, costs or expenses of any kind arising from death, personal injury, property damage or other cause based or asserted upon any act, omission, or breach connected with or arising from the progress of Work or performance of service under this Agreement or the Contract Documents. As part of this indemnity, Contractor shall protect and defend, at its own expense, District, Architect, Inspector, the State of California and their officers, employees, agents and independent contractors from any legal action including attorneys fees or other proceeding based upon such act, omission, or breach.

Furthermore, Contractor agrees to and does hereby defend, indemnify and hold harmless District, Architect, Inspector, the State of California and their officers, employees, agents and independent contractors from every claim or demand made, and every liability, loss, damage, expense or attorneys fees of any nature whatsoever, which may be incurred by reason of:

(a) Liability for (1) death or bodily injury to persons; (2) damage or injury to, loss (including theft), or loss of use of, any property; (3) any failure or alleged failure to comply with any provision of law or the Contract Documents; or (4) any other loss, damage or expense, sustained by any person, firm or corporation or in connection with the Work called for in this Agreement or the Contract Documents, except for liability resulting from the sole or active negligence, or the willful misconduct of the District.

(b) Any bodily injury to or death of persons or damage to property caused by any act, omission or breach of Contractor or any person, firm or corporation employed by Contractor, either directly or by independent contract, including all damages or injury to, loss (including theft), or loss of use of, any property, sustained by any person, firm or corporation, including District, arising out of or in any way connected with Work covered by this Agreement or the Contract Documents, whether said injury or damage occurs either on or off District property, but not for any loss, injury, death or damages caused by the sole or active negligence or willful misconduct of the District.

(c) Any dispute between Contractor and Contractor's subcontractors/supplies/sureties, including, but not limited to, any failure or alleged failure of the Contractor (or any person hired or employed directly or indirectly by the Contractor) to pay any Subcontractor or Materialman of any tier or any other person employed in connection with the Work and/or filing of any stop notice or mechanic's lien claims.

Contractor, at Contractor's own expense, cost, and risk, shall defend any and all claims, actions, suits, or other proceedings that may be brought or instituted against the District, its officers, agents or employees, on or founded upon any cause, damage, or injury identified herein Section 3.16.1 and shall pay or satisfy any judgment that may be rendered against the District, its officers, agents or employees in any action, suit or other proceedings as a result thereof.

Contractor shall ensure that its contract with each of its subcontractors contains provisions requiring the subcontractors to defend, indemnify and hold harmless the District, Architect, Inspector, the State of California to a minimum level as set forth in this Article and consistent with the language of 3.16.1.

The Contractor's and Subcontractors' obligation to defend, indemnify and hold harmless the District, Architect, Inspector, the State of California and their officers, employees, agents and independent contractors hereunder shall include, without limitation, any and all claims, damages, and costs for the following: (1) any damages or injury to or death of any person, and damage or injury to, loss (including theft), or loss of use of, any property; (2) breach of any warranty or guaranty, express or implied; (3) failure of the Contractor or Subcontractors to comply with any applicable governmental law, rule, regulation, or other requirement; and (4) products installed in or used in connection with the Work.

3.17 SUBMISSION OF DAILY REPORTS

3.17.1 General.

At the close of each working day, the Contractor shall submit a daily report to the District and the Inspector, on forms approved by the District, together with applicable delivery tickets, listing all labor, materials, and equipment involved for that day. An attempt shall be made to reconcile the report daily, and it shall be signed by a District representative and the Contractor. In the event of disagreement, pertinent notes shall be entered by each party to explain points which cannot be resolved that day. Each party shall retain a signed copy of the report. Reports by subcontractors or others shall be submitted through the Contractor.

3.17.2 Labor.

The report required by Paragraph 3.17.1 shall show names of workers, classifications, hours worked.

3.17.3 Materials.

The report required by Paragraph 3.17.1 shall describe materials used.

3.17.4 Equipment.

The report required by Paragraph 3.17.1 shall show type of equipment, size, , and hours of operation, including loading and transportation, if applicable. .

3.18 EXECUTION OF THE WORK

3.18.1 Examination.

3.18.1.1 Acceptance of Conditions: Examine substrates, areas, and conditions, with Installer or Applicator present where indicated, for compliance with requirements for installation tolerances and other conditions affecting performance. Record all observations in writing.

3.18.1.2 Examine roughing-in for mechanical and electrical systems to verify actual locations of connections before equipment and fixture installation.

3.18.1.3 Examine walls, floors, and roofs for suitable conditions where products and systems are to be installed.

3.18.1.4 Proceed with installation only after unsatisfactory conditions have been corrected. Proceeding with the Work indicates acceptance of surfaces and conditions.

3.18.2 Existing Site and/or Building Conditions.

The existence and location of site improvements, utilities, and other construction indicated as existing are not guaranteed. Before beginning Work, investigate and verify the existence and location of mechanical and electrical systems and other construction affecting the Work.

Before construction, verify the location and points of connection of all utility services for the entire Project.

3.18.3 Existing Utilities.

The existence and location of underground and other utilities and construction indicated in the Contract Documents as existing are not guaranteed. Prior to beginning the Work investigate and verify the existence and location of all underground utilities and/or other improvements affecting the Work.

3.18.3.1 Before construction, verify the location and invert all elevations at points of connection of sanitary sewer, storm sewer, and water-service piping; and all underground electrical services.

3.18.3.2 Furnish location data for work related to Project that must be performed by public utilities serving Project site.

3.18.4 Preparation.

Review of Contract Documents and Field Conditions: Immediately on discovery of the need for clarification of the Contract Documents, submit a written request for information (RFI) to the District.

Existing Utility Information: Furnish information to the District and Architect that is necessary to adjust, move, or relocate existing utility structures, utility poles, lines, services, or other utility appurtenances located in or affected by construction. Contractor shall coordinate with authorities having jurisdiction.

Field Measurements: Take field measurements as required to fit the Work properly. Recheck measurements before installing each product. Where portions of the Work are indicated to fit to other construction, Contractor shall investigate and verify all dimensions of other construction by field measurements before fabrication. Contractor shall coordinate fabrication schedule with construction progress to avoid delaying the Work.

Space Requirements: Verify space requirements and dimensions of items shown diagrammatically on Contract Documents. Contractor shall be responsible for all coordination and measurements including means and methods of Construction.

3.18.5 Construction Layout.

Verification: Before proceeding to lay out the Work, Contractor shall verify layout information and Field condition in relation to the Contract documents. Notify District and Architect immediately of any discrepancies.

3.18.6 Installation.

General Contractor shall locate the Work and components of the Work accurately, in correct alignment and elevation, as indicated.

3.18.6.1 Make vertical work plumb and make horizontal work level.

3.18.6.2 Where space is limited, install components to maximize space available for maintenance and ease of removal for replacement.

3.18.6.3 Conceal pipes, ducts, and wiring in furnished areas, unless otherwise indicated.

3.18.6.4 Maintain minimum headroom clearance of eight feet in spaces without a suspended ceiling.

3.18.6.5 Contractor shall comply with manufacturer's written instructions and recommendations for installing products in applications indicated.

3.18.6.6 Contractor shall install products at the time and under conditions that will ensure the best possible results. Maintain conditions required for performance until accepted by District.

3.18.6.7 Contractor shall conduct construction operations so no part of the Work is subjected to damage or loading in excess of that expected during normal conditions of occupancy.

3.18.6.8 Anchors and Fasteners: Provide anchors and fasteners as required to anchor each component securely in place, accurately located and aligned with other portions of the Work.

3.18.6.9 Mounting Heights: Where mounting heights are not indicated, mount components at heights directed by Architect.

3.18.6.10 Allow for building movement, including thermal expansion and contraction.

3.18.6.11 Coordinate installation of anchorages. Furnish setting drawings, templates, and directions for installing anchorages, including sleeves, concrete inserts, anchor bolts, and items with integral anchors, that are to be embedded in concrete or masonry. Deliver such items to Project site in time for installation.

3.18.6.12 Joints: Make joints of uniform width. Where joint locations in exposed work are not indicated, arrange joints for the best visual effect. Fit exposed connections together to form hairline joints.

3.18.6.13 Hazardous Materials: Use only products, cleaners, and installation materials that are not classified as or considered hazardous.

3.18.7 District-Installed Products

3.18.7.1 Site Access: Provide access to Project site for District's construction forces.

3.18.7.2 Coordination: Coordinate construction and operations of the Work with work performed by District construction forces.

3.18.7.3 Construction Schedule: Inform District of Contractor's preferred construction schedule for District's portion of the Work. Adjust construction schedule based on a mutually agreeable timetable. Notify District and Architect if changes to schedule are required due to differences in actual construction progress.

3.18.7.4 Pre-installation Conferences: Include District's construction forces at pre-installation conferences covering portions of the Work that are to receive District's work. Attend pre-installation conferences conducted by District's construction forces if portions of the Work depend on District's construction forces.

3.19 DSA VERIFIED REPORTS AND CERTIFICATE OF COMPLIANCE

3.19.1 Contractor Actions.

The Contractor acknowledges and agrees that a material obligation of the Contractor under the Contract Documents is the completion by the Contractor of all actions and activities which by the Contract Documents or by operation of applicable law, code, rule or regulation are the responsibility of the Contractor relating to DSA reporting requirements pursuant to Education Code §81141 (including amendments thereto) and issuance of DSA's Certificate of Compliance for the Project pursuant to Education Code §81147 (including amendments thereto) upon completion of Project construction. The foregoing shall include without limitation, the timely preparation, completion and filing of Verified Reports during Project construction and the filing of the Final Verified Report with DSA within ten (10) days of the determination of Project Final Completion. The Contractor shall provide the Project Inspector, Architect, Construction Manager retained by the District for the Project and the District with copies of all Verified Reports completed by the Contractor and submitted to DSA; such copies shall be provided to the Project Inspector, Architect, the Construction Manager and the District concurrently with the Contractor's submission thereof to DSA.

3.19.2 Final Verified Report Value.

Notwithstanding any provision of the Contract Documents to the contrary, the completion and filing of the Final Verified Report with DSA by the Contractor is an express condition precedent to the District's disbursement of Twelve Thousand Dollars (\$12,000) of the Contract Sum due the Contractor under this Agreement ("the Final Verified Report Value"). The Final Verified Report Value is in addition to, and not in lieu of, retention withheld and retained by the District from Progress Payments disbursed to the Contractor during Project construction. The District's disbursement of the Final Verified Report Value to the Contractor shall be made by the District within thirty (30) days of the presentation by the Contractor to the Project Inspector, Architect, Construction Manager and District of reasonably satisfactory written evidence that the Contractor has filed the Contractor's Final Verified Report with DSA in accordance with the preceding and the submission of a billing statement by the Contractor to the District for payment of the Final Verified Report Value. If the Contractor fails to file the Final Verified Report with DSA within ten (10) days of the determination of Project Final Completion, notwithstanding the preparation or filing of such Final Verified Report by the Contractor thereafter, the District may in the sole and exclusive discretion of the District retain and withhold from disbursement to the Contractor all or any part of the Final Verified Report Value as damages for the failure of the Contractor to have timely discharged its obligations hereunder.

3.20 NOISE CONTROL

The Contractor shall be responsible for the installation and maintenance of noise reducing devices on construction equipment. Contractor shall comply with the requirements of the city and county having jurisdiction with regard to noise ordinances governing construction sites and activities. Construction

equipment noise is subject to the control of the Environmental Protection Agency's Noise Control Program (Part 204 of Title 40, Code of Federal Regulations). If classes are in session at any point during the progress of the Project, and, in the District's reasonable discretion, the noise from such Work disrupts or disturbs the students or faculty or the normal operation of the college, at the District's request, the Contractor shall schedule the performance of all such Work around normal campus hours or make other arrangements so that the Work does not cause such disruption or disturbance. In no event shall Contractor have a right to receive additional compensation or an extension to the contract time as a result of any such rescheduling or the making of such arrangements. These controls shall be implemented during site preparation and construction.

ARTICLE 4

ADMINISTRATION OF THE CONTRACT

4.1 ARCHITECT

4.1.1 Replacement of Architect.

In the case of the termination of the Architect, the District may appoint an architect or another construction professional or may perform such functions with its own licensed professional personnel. The status of the replacement Architect under the Contract Documents shall be the same as that of the former architect.

4.2 ARCHITECT'S ADMINISTRATION OF THE CONTRACT

4.2.1 Status.

Pursuant to Titles 24 and 21 of the California Code of Regulations and as required pursuant to the Field Act, Education Code 81130 et. seq. the Architect will provide administration of the Contract Documents and the Work, and will be a District representative during construction, as well as during the one (1) year period following the commencement of any warranties or guaranties. The Architect will have authority to act on behalf of the District only to the extent provided in the Contract Documents.

4.2.2 Site Visits.

The Architect will visit the Site at intervals necessary in the judgment of the Architect to become generally familiar with the progress and quality of the Work and to determine in general if the Work is being performed in accordance with the Contract Documents.

4.2.3 Limitations of Construction Responsibility.

The Architect shall not have control over, charge of, or be responsible for construction means, methods, techniques, schedules, sequences or procedures, fabrication, procurement, shipment, delivery, receipt, installation, or for safety precautions and programs in connection with the Work, since these are solely the Contractor's responsibility under the Contract Documents. The Architect shall not be responsible for the Contractor's, Subcontractors', material or equipment suppliers', or any other person's schedules or failure to carry out the Work in accordance with the Contract Documents. The Architect shall not have control over or charge of acts or omissions of the Contractor, Subcontractors, their agents or

employees, or any other persons or entities performing or supplying portions of the Work. The Contractor shall not be relieved of obligations to perform the Work in accordance with the Contract Documents either by activities or duties of the Architect in the Architect's administration of the Contract Documents, or by tests, inspections, or approvals required or performed by persons other than the Contractor.

4.2.4 Communications Facilitating Contract Administration.

Except as otherwise provided in the Contract Documents the Contractor shall communicate through the District representative. The District representative shall be promptly informed, and shall receive copies of all written communications. Contractor shall not rely upon any communications from the District that is not from the District's representative. Communications by and with the Architect's consultants shall be through the Architect. Communications by and with Subcontractors and material or equipment suppliers shall be through the Contractor.

4.2.5 Payment Applications.

The Architect will review and make recommendations to the District regarding the amounts due the Contractor on the Certificates for Payment pursuant to Article 9 and subject to the Inspector's approval and Architect's observation.

4.2.6 Rejection of Work.

In addition to the rights, duties, and obligations of the Inspector under this Article, the Architect may recommend to the District that the District reject Work which does not conform to the Contract Documents. Whenever the Architect considers it necessary or advisable to achieve the intent of the Contract Documents, the Architect may recommend to the District that the District require additional inspection or testing of the Work in accordance with Paragraph 13.5, whether or not such Work is fabricated, installed, or completed. However, neither this authority of the Architect nor a decision made in good faith either to exercise or not to exercise such authority shall give rise to a duty or responsibility of the Architect to the Contractor, Subcontractors, material and equipment suppliers, their agents or employees, or other persons performing portions of the Work.

4.2.7 Warranties and Guaranties Upon Completion.

The Architect, in conjunction with the District and Inspector will conduct field reviews of the Work to determine the date of completion, shall receive and forward to the District for the District's review and records written warranties, guaranties, and related documents required by the Contract and assembled by the Contractor, and will issue a final Certificate for Payment when the Architect believes the Work has been completed in compliance with the requirements of the Contract Documents. The handling by the Architect of such warranties, guaranties, maintenance manuals, or similar documents shall not diminish or transfer to the Architect any responsibilities or liabilities required by the Contract Documents of the Contractor or other entities, parties, or persons performing or supplying the Work.

The Architect will conduct a field review of the Contractor's comprehensive list of items to be completed or corrected (final punch list) and one (1) follow-up field review if required. The cost incurred by the District for further field reviews or the preparation of further punch lists by the Architect shall be invoiced to the Contractor and deducted from the final payment.

4.2.8 Interpretation.

The Architect will interpret and decide matters concerning performance and requirements of the Contract Documents.

4.2.9 Additional Instructions.

4.2.9.1 *Typical Parts and Sections.* Whenever typical parts or sections of the Work are completely detailed on the Drawings, and other parts or sections which are essentially of the same construction are shown in outline only, the complete details shall apply to the Work which is shown in outline.

4.2.9.2 *Dimensions.* Dimensions of Work shall not be determined by scale or rule. Figured dimensions shall be followed at all times. If figured dimensions are lacking on Drawings, Architect shall supply them on request. The Architect's decisions on matters relating to aesthetic effect will be final.

4.3 **INSPECTOR OF RECORD**

4.3.1 General.

One or more project inspectors employed by the District and approved by the Division of the State Architect will be assigned to the Work in accordance with the requirements of Title 24 of the California Code of Regulations. The Inspector(s) duties are as specifically defined in Title 24.

4.3.2 Inspector's Duties.

All Work shall be under the observation of the Inspector. The Inspector shall have free access to any or all parts of the Work at any time. The Contractor shall furnish the Inspector such information as may be necessary to keep the Inspector fully informed regarding progress and manner of Work and character of materials. Such observations shall not, in any way, relieve the Contractor from responsibility for full compliance with all terms and conditions of the Contract, or be construed to lessen to any degree the Contractor's responsibility for providing efficient and capable superintendence. The Inspector is not authorized to make changes in the drawings or specifications nor shall the Inspector's approval of the Work and methods relieve the Contractor of responsibility for the correction of subsequently discovered defects, or from its obligation to comply with the Contract Documents.

4.3.3 Inspector's Authority to Reject or Stop Work.

The Inspector shall have the authority to reject Work whenever provisions of the Contract Documents are not being complied with, and Contractor shall instruct its Subcontractors and employees accordingly. In addition, the Inspector may stop any Work that poses a probable risk of harm to persons or property. The Contractor shall instruct its employees, Subcontractors, material and equipment suppliers, etc., accordingly. The absence of any Stop Work order or rejection of any portion of the Work shall not relieve the Contractor from any of its obligations pursuant to the Contract Documents.

4.3.4 Inspector's Facilities.

Within seven (7) days after notice to proceed, the Contractor shall provide the Inspector with the temporary facilities as required under Division 1 of the Specifications.

4.3.5 Testing Times.

The District will provide inspection and testing at its cost during the normal eight (8) hour day Monday through Friday (except holidays). Work by the Contractor outside of the normal eight (8) hour day shall constitute an authorization from the Contractor to the District to provide inspection and testing as required outside of the normal eight (8) hour day. Contractor shall reimburse District for any additional costs associated with inspection and testing (including re-inspection and re-testing) outside the normal eight-hour day and for any retests caused by the Contractor.

4.4 RESPONSIBILITY FOR ADDITIONAL CHARGES INCURRED BY THE DISTRICT FOR PROFESSIONAL SERVICES

If at any time prior to the completion of the requirements under the Contract Documents, the District is required to provide or secure additional professional services for any reason by any act of the Contractor, the Contractor shall be invoiced by the District for any costs incurred for any such additional services, which costs shall be deducted from the next progress payment. Such invoicing shall be independent from any other District remedies and shall not be considered a waiver of any District rights or remedies. If payments then or thereafter due to the Contractor are not sufficient to cover such amounts, the Contractor shall pay the difference to the District. Additional services shall include, but shall not be limited to, the following:

- (a) Services made necessary by the default of the Contractor.
- (b) Services made necessary due to the defects or deficiencies in the Work of the Contractor.
- (c) Services required by failure of the Contractor to perform according to any provision of the Contract Documents.
- (d) Services in connection with evaluating substitutions of products, materials, equipment, Subcontractors' proposed by the Contractor, and making subsequent revisions to drawings, specifications, and providing other documentation required (except for the situation where the specified item is no longer manufactured or available).
- (e) Services for evaluating and processing claims submitted by the Contractor in connection with the Work outside the established Change Order process.
- (f) Services required by the failure of the Contractor to prosecute the Work in a timely manner in compliance within the specified time of completion.
- (g) Services in conjunction with the testing, adjusting, balancing and start-up of equipment other than the normal amount customarily associated for the type of Work involved.
- (h) Services in conjunction with more than one (1) re-review of submittals of shop drawings, product data, samples, etc.

4.5 DISPUTES

4.5.1 Decision of Architect.

Disputes between District and Contractor involving money or time, including those alleging an error or omission by the Architect, shall be referred initially to the Architect for action as provided in Paragraph 4.5.2. A decision by the Architect, as provided in Paragraph 4.5.5, shall be required as a

condition precedent to proceeding with remedies set forth in Paragraph 4.5.6 as to all such matters arising prior to the date final payment is due, regardless of whether such matters relate to execution and progress of the Work, or the extent to which the Work has been completed. The decision by the Architect in response to a Claim shall not be a condition precedent to the remedies under Paragraph 4.5.2 through 4.5.5 in the event: (1) the position of Architect is vacant; (2) the Architect has not received evidence or has failed to render a decision within agreed time limit; (3) the Architect has failed to take action required under Paragraph 4.6.4 within thirty (30) days after the Claim is made, forty-five (45) days have passed after the Claim has been referred to the Architect; or (4) the Claim relates to a Stop Notice Claim not arising from any extra change order or Construction Change Directive for which approval has not been provided.

4.5.2 Architect's Review.

The Architect will review Claims and take one or more of the following preliminary actions within ten (10) days of receipt of a Claim: (1) request additional supporting data from the Claimant; (2) submit a schedule to the parties indicating when the Architect expects to take action; (3) reject the Claim in whole or in part, stating reasons for rejection; (4) recommend approval of the Claim; or (5) suggest a compromise. The Architect may also, but is not obligated to, notify the surety, if any, of the nature and amount of the Claim.

4.5.3 Documentation if Resolved.

If a Claim has been resolved, the Architect will prepare or obtain appropriate documentation.

4.5.4 Actions if Not Resolved.

If a Claim has not been resolved and all documentation requested pursuant to Paragraph 4.5.2 has been provided, the party making the Claim shall, within ten (10) days after the Architect's preliminary response, take one or more of the following actions: (1) modify the initial Claim; (2) notify the Architect that the initial Claim stands; or (3) supplement with additional supporting data.

4.5.5 Architect's Written Decision.

If a Claim has not been resolved after consideration of the foregoing and of other evidence presented by the parties or requested by the Architect, the Architect will notify the parties in writing that the Architect's decision will be made within twenty (20) days. Upon expiration of such time period, the Architect will render to the parties its written decision relative to the Claim, including any change in the Contract Sum or Contract Time or both. The Architect may, but is not obligated to, notify the surety and request the surety's assistance in resolving the controversy.

4.5.6 Continuing Contract Performance.

Pending final resolution of a Claim, including, negotiation, mediation, arbitration, or litigation, the Contractor shall proceed diligently with performance of the Contract, and the District shall continue to make any undisputed payments in accordance with the Contract. If the dispute is not resolved, Contractor agrees it will neither rescind the contract nor stop the progress of the work, but Contractor's sole remedy shall be to submit such controversy to determination by a court of competent jurisdiction in the county where the project is located, after the project has been completed, and not before. At the District's sole

option, the District may submit individual disputes for binding arbitration and Contractor agrees to the resolution determined for each individual dispute by Arbitrator, including resolution of time and delays. If binding arbitration is utilized for individual disputes, such resolution is full and final as to that particular Claim.

4.5.7 Claims for Concealed Trenches or Excavations Greater Than Four Feet Below the Surface.

When any excavation or trenching extends greater than four feet below the surface or if any condition involving hazardous substances are encountered:

(a) Immediately upon discovery, The Contractor shall promptly, and before the following conditions are disturbed, notify the District, by telephone and in writing, of the condition except:

1. If such condition is a hazardous waste condition, and Contractor's bid includes removal or disposal of hazardous substances. Material that the Contractor believes may be a material that is hazardous waste, as defined in Section 25117 of the Health and Safety Code, that is required to be removed to a Class I, Class II, or Class III disposal site in accordance with the provisions of existing law. In such case, the notice bulletin procedures of Article 7 apply.
2. Subsurface or latent physical conditions at the Site differing from those indicated.
3. Unknown physical conditions at the Site of any unusual nature, different materially from those ordinarily encountered and generally recognized as inherent in Work of the character provided for in the Contract.

(b) The District shall investigate the conditions, and if District finds that the conditions do materially so differ, do involve hazardous waste, and cause a decrease or increase in the Contractor's cost of, or the time required for, performance of any part of the Work shall issue a change order or construction change directive under the procedures described in the Contract.

(c) In the event that a dispute arises between the District and the Contractor whether the conditions materially differ, involve hazardous waste, or cause a decrease or increase in the Contractor's cost of, or time required for, performance of any part of the work, the Contractor shall not be excused from any scheduled completion date provided for by the Contract, but shall proceed with all Work to be performed under the Contract. The Contractor shall retain any and all rights provided either by Contract or by law which pertain to the resolution of disputes and protests between the contracting parties.

4.5.8 Claims for Extension of Time.

If Contractor and District cannot agree upon an extension of time, whether compensable or not, then Contractor must have first completed the procedures set forth in Paragraph 8.4. Upon completion of the procedures set forth under Paragraph 8.4, Contractor must then comply with the requirements in this Article including those set forth under Paragraph 4.5.9.

4.5.9 Claims Procedures.

4.5.9.1 Procedure applicable to all Claims:

(a) Definition of Claim: A "Claim" means a separate demand by the Contractor for (1) time extension, (2) payment of money or damages arising from Work done by or on behalf of the Contractor pursuant to the Contract and payment of which is not otherwise expressly provided for or the Claimant is not otherwise entitled to, or (3) and amount the payment of which is disputed by the District.

(b) Filing Claim is Not Basis To Discontinue Work: The Contractor shall promptly comply with Work under the Contract or Work requested by the District even though a written Claim has been filed. The Contractor and the District shall make good faith efforts to resolve any and all Claims that may arise during the performance of the Work covered by this contract.

(c) Claim Notification: The Contractor shall within seven (7) calendar days after the Claim arises, submit a notification, in writing, with the District stating clearly the basis for the Claim. If the notification is not submitted within seven (7) days after the Claim arises, the Contractor shall be deemed to have waived all right to assert the Claim, and the Claim shall be denied. Claims submitted after the final payment date shall also be considered null and void by the District. All Claims shall be reviewed pursuant to Paragraph 4.5.1, 4.5.2, and 4.5.5. In order to qualify as a Claim, the written notice must state that it is a Claim submitted under this paragraph of these General Conditions.

(d) Formal Claim Appeal Submission: If the Contractor does not concur with the District's decision regarding the Claim Notification, the Contractor will issue a formal Claim Appeal within fourteen (14) days of receipt of the District's decision and all detailed information in support of the Claim Appeal within thirty (30) days. All appeals shall be submitted before final payment. If the Claim Appeal is not submitted within fourteen (14) calendar days and detailed information within thirty (30) days, the Contractor shall be deemed to have waived its right to assert the Claim and the Claim shall be denied. Contractor's failure to submit any detailed information which is in the possession of Contractor shall render such information inadmissible by Contractor at trial or arbitration.

(e) Appeal Claim Format: The Contractor shall provide all written detailed documentation which supports the Claim, including but not limited to: arguments, justifications, cost, estimates, schedule analysis and detailed documentation. The format of the Claim Appeal shall be as follows:

- (1) Cover letter.
- (2) Summary of factual basis of Claim and amount of Claim.
- (3) Summary of the basis of the Claim, including the specific clause and section under the Contract under which the Claim is made.
- (4) Documents relating to the Claim, including:

- a. Specifications
- b. Drawings
- c. Clarifications (RFI's)
- d. Other relevant information
- e. Analysis of claim merit.
- f. Analysis of claim cost.
- g. For Claims relating to time extensions, an analysis and supporting documentation evidencing any effect upon the critical path.
- h. Certification.
- i. Chronology of events and related correspondence.
- j. Daily reports and logs.

(f) Certification: The Contractor (and subcontractors, if applicable) shall submit with the Claim a certification under penalty of perjury:

- (1) That the Contractor has reviewed the Claim and that such Claim is made in good faith;
- (2) Supporting data are accurate and complete to the best of the Contractor's knowledge and belief;
- (3) The amount requested accurately reflects the amount of compensation for which the Contractor believes the District is liable.
- (4) That the Contractor is familiar with Government Code Sections 12650 et seq. and Penal Code Section 72 and that false Claims can lead to substantial fines and/or imprisonment.

(g) Signature of Certification: If the Contractor is not an individual, the certification shall be executed by an officer or general partner of the Contractor having overall responsibility for the conduct of the Contractor's affairs.

(h) Mandatory Claim Appeal Procedure: The Contractor's Claim Appeal shall be denied if it fails to provide the written basis of the Claim and certification as set forth herein.

(i) District May Request Additional Information: Within thirty (30) days of receipt of the Claim Appeal and the information under this Article, the District may request in writing any additional documentation supporting the Claim or documentation relating to defenses to the Claim which the District may assert.

4.5.9.2 *Binding Arbitration of Individual Claim Issues.* At the District's sole option, the District may submit individual disputes, or Claims, to binding arbitration and Contractor agrees to the resolution determined for each individual dispute by Arbitrator, including resolution of time and delays. If binding arbitration is utilized, such resolution is a full and final resolution of the particular Claim or dispute. Under no circumstances may the Contractor stop work, rescind its contract or otherwise slow the progress of Work during resolution of individual Claims in binding Arbitration.

4.5.9.3 *Resolution of Disputes in Court of Competent Jurisdiction.* If Claims are not resolved under the procedure set forth and pursuant to Article 4.5.9.2, such Claim or controversy shall be submitted to a court in the county of competent jurisdiction after the Project has been completed, and not before.

4.5.9.4 *Warranties, Guaranties and Obligations.* The duties and obligations imposed by these General Conditions and the rights and remedies available hereunder to the parties hereto, and, in particular but without limitation, the warranties, guaranties and obligations imposed upon Contractor by the General Conditions and amendments thereto; and all of the rights and remedies available to District and Architect thereunder, are in addition to, and are not to be construed in any way as a limitation of, any rights and remedies available to any or all of them which are otherwise imposed or available by laws or regulations by special warranty or guaranty or by other provisions of the Contract Documents, and the provisions of this Paragraph will be as effective as if repeated specifically in the Contract Documents in connection with each particular duty, obligation, right and remedy to which they apply.

ARTICLE 5

SUBCONTRACTORS

5.1 DEFINITIONS

5.1.1 Subcontractual Relations

By appropriate agreement, written where legally required for validity, the Contractor shall require each Subcontractor, to the extent of the Work to be performed by the Subcontractor, to be bound to the Contractor by terms of the Contract Documents, and to assume toward the Contractor all the same obligations and responsibilities, assumed by Contractor pursuant to the Contract Documents. Each subcontract agreement shall preserve and protect the rights of the District and the Architect under the Contract Documents with respect to the Work to be performed by the Subcontractor so that subcontracting thereof will not prejudice such rights. Where appropriate, the Contractor shall require each Subcontractor to enter into similar agreements with Sub-subcontractors. The Contractor shall make available to each proposed Subcontractor, prior to the execution of the subcontract agreement, copies of the Contract Documents to which the Subcontractor will be bound. Upon written request of the Subcontractor, the Contractor shall identify to the Subcontractor the terms and conditions of the proposed subcontract agreement, which may be at variance with the Contract Documents. Subcontractors shall similarly make copies of applicable portions of such documents available to their respective proposed Sub-subcontractors.

5.1.2 Subcontractor Licenses.

All subcontractors shall be properly licensed by the California State Licensing Board.

5.1.3 Substitution of Subcontractor

Substitution of Subcontractors shall be permitted only as authorized under Public Contract Code §§ 4107 et. Seq. Any substitutions of Subcontractors shall not result in any increase in the Contract Price or result in the granting of any extension of time for the completion of the Project.

5.1.4 Contingent Assignment of Subcontracts and Other Contracts

Each subcontract and other contract or agreement for any portion of the Work is hereby assigned by the Contractor to the District provided that:

- (a) Such assignment is effective only after termination of this contract with the Contractor by the District as provided herein and only for those subcontracts and other contracts and agreements that the District accepts by notifying the Subcontractor or Materialman (as may be applicable) in writing; and
- (b) Such assignment is subject to the prior rights of the Surety(ies) obligated under the Payment Bond and Performance Bond.

The Contractor shall include adequate provisions for this contingent assignment of subcontracts and other contracts and agreements in each such document.

ARTICLE 6

CONSTRUCTION BY DISTRICT OR BY SEPARATE CONTRACTORS

6.1 DISTRICT'S RIGHT TO PERFORM CONSTRUCTION AND TO AWARD SEPARATE CONTRACTS

6.1.1 Separate Contracts.

- (a) District reserves the right to let other contracts in connection with this Work. Contractor shall afford other contractors reasonable opportunity for (1) introduction and storage of their materials; (2) access to the Work; and (3) execution of their work. Contractor shall properly connect and coordinate its work with that of other Contractors.
- (b) If any part of Contractor's Work depends on proper execution or results of any other contractor, the Contractor shall inspect and within seven (7) days or less, report to Architect, in writing, any defects in such work that render it unsuitable for proper execution of Contractor's work. Contractor will be held accountable for damages to District for that work which it failed to inspect or should have inspected. Contractor's failure to inspect and report shall constitute its acceptance of other contractors' work as fit and proper for reception of its work, except as to defects which may develop in other contractors' work after execution of Contractor's work.
- (c) To ensure proper execution of its subsequent Work, Contractor shall measure and inspect Work already in place and shall at once report to the Architect in writing any discrepancy between executed Work As-Built drawings and the Contract Documents.

(d) Contractor shall ascertain to its own satisfaction the scope of the Project and nature of any other contracts that have been or may be awarded by District in prosecution of the Project and the potential impact of such work on Contractor's schedule.

(e) Nothing herein contained shall be interpreted as granting to Contractor the exclusive occupancy at the site of Project. Contractor shall not cause any unnecessary hindrance or delay to any other contractor working on the Project Site. If execution of any contract by the District is likely to cause interference with Contractor's performance of its contract, District shall decide which contractor shall cease work temporarily and which contractor shall continue, or whether work can be coordinated so that contractors may proceed simultaneously.

(f) District shall not be responsible for any damages suffered or extra costs incurred by Contractor resulting directly or indirectly from award or performance or attempted performance of any other contract or contracts at the Project, or caused by any decision or omission of District respecting the order of precedence in performance of contracts.

CONTRACTOR IS AWARE THAT THIS CONTRACT MAY BE SPLIT INTO SEVERAL PHASES. IF THE CONTRACT IS SPLIT INTO PHASES THEN CONTRACTOR HAS MADE ALLOWANCE FOR ANY DELAYS OR DAMAGES WHICH MAY ARISE FROM COORDINATION WITH CONTRACTORS FOR OTHER PHASES. IF ANY DELAYS SHOULD ARISE FROM ANOTHER CONTRACTOR WORKING ON A DIFFERENT PHASE, CONTRACTOR'S SOLE REMEDY FOR DAMAGES, INCLUDING DELAY DAMAGES, SHALL BE AGAINST THE CONTRACTOR WHO CAUSED SUCH DAMAGE AND NOT THE DISTRICT. CONTRACTOR SHALL PROVIDE ACCESS TO OTHER CONTRACTORS FOR OTHER PHASES AS NECESSARY TO PREVENT DELAYS AND DAMAGES TO OTHER CONTRACTORS WORKING ON OTHER PHASES OF CONSTRUCTION.

6.1.2 District's Right to Carry Out the Work.

See Paragraph 2.2.

6.1.3 Designation as Contractor.

When separate contracts are awarded to contractors on the Project Site, the term "Contractor" in the Contract Documents in each case shall mean the Contractor who executes each separate District/Contractor Agreement.

6.1.4 Contractor Duties.

The Contractor shall have overall responsibility to reasonably coordinate and schedule Contractor's activities with the activities of the District's own forces and of each separate contractor with the Work of the Contractor, who shall cooperate with them. The Contractor shall participate with other separate contractors and the District in reviewing their construction schedules when directed to do so. The Contractor shall make any revisions to the construction schedule and Contract Sum deemed necessary after a joint review and mutual agreement. The construction schedules shall then constitute the schedules to be used by the Contractor, separate contractors, and the District until subsequently revised.

Additionally, Contractor shall coordinate with Architect and District inspector to ensure timely and proper progress of work.

6.2 CONSTRUCTIVE OWNERSHIP OF PROJECT SITE AND MATERIAL

Upon commencement of Work, the Contractor becomes the constructive owner of the entire site, improvements, material and equipment on Project site. Contractor must ensure proper safety and storage of all materials and assumes responsibility as if Contractor was the owner of the Project site. All risk of loss or damage shall be borne by Contractor during the Work until the date of Completion. As construction owner, Contractor must carry adequate insurance in case of calamity and is not entitled to rely on the insurance requirements as set forth in this agreement as being adequate coverage in case of calamity.

6.3 DISTRICT'S RIGHT TO CLEAN UP

If a dispute arises among the Contractor, separate contractors, and the District as to the responsibility under their respective contracts for maintaining the premises and surrounding area free from waste materials and rubbish as described in Paragraph 3.12, the District may clean up and allocate the cost among those it deems responsible.

ARTICLE 7

CHANGES IN THE WORK

7.1 CHANGES

7.1.1 No Changes Without Authorization.

There shall be no change whatsoever in the drawings, specifications, or in the Work without an executed Change Order, Construction Change Directive, or order by the Architect for a minor change in the Work as herein provided. District shall not be liable for the cost of any extra work or any substitutions, changes, additions, omissions, or deviations from the Drawings and Specifications unless the District's Governing Board has authorized the same and the cost thereof approved in writing by Change Order or executed Construction Change Directive. No extension of time for performance of the Work shall be allowed hereunder unless claim for such extension is made at the time changes in the Work are ordered, and such time duly adjusted in writing in the Change Order. The provisions of the Contract Documents shall apply to all such changes, additions, and omissions with the same effect as if originally embodied in the Drawings and Specifications. Notwithstanding anything to the contrary in this Article 7, all Change Orders shall be prepared and issued by the District and shall become effective when executed by the District's Governing Board, the Architect, the Contractor, and the DSA.

Should any Change Order result in an increase in the Contract Sum, the cost of such Change Order shall be agreed to, in writing, in advance by Contractor and District and be subject to the monetary limitations set forth in Public Contract Code Section 20659. In the event that Contractor proceeds with any change in Work without first notifying District and obtaining the Architect's and District's consent to a Change Order, Contractor waives any claim of additional compensation for such additional work.

CONTRACTOR UNDERSTANDS, ACKNOWLEDGES, AND AGREES THAT THE REASON FOR THIS NOTICE REQUIREMENT IS SO THAT DISTRICT MAY HAVE AN OPPORTUNITY TO ANALYZE THE WORK AND DECIDE WHETHER THE DISTRICT SHALL PROCEED WITH THE CHANGE ORDER OR ALTER THE PROJECT SO THAT SUCH CHANGE IN WORK BECOMES UNNECESSARY.

7.1.2 Architect Authority.

The Architect will have authority to order minor changes in the Work not involving any adjustment in the Contract Sum, or an extension of the Contract Time, or when a change which is inconsistent with the intent of the Contract Documents. Such changes shall be effected by written Change Order and shall be binding on the District and the Contractor. The Contractor shall carry out such written orders promptly.

7.2 CHANGE ORDERS ("CO")

A CO is a written instrument prepared by the Architect and signed by the District (as authorized by the District's Governing Board), the Contractor, the Architect, stating their agreement upon all of the following:

- (a) A description of a change in the Work;
- (b) The amount of the adjustment in the Contract Sum, if any; and
- (c) The extent of the adjustment in the Contract Time, if any.

7.3 CONSTRUCTION CHANGE DIRECTIVE

7.3.1 Definition.

A Construction Change Directive is a written order prepared by the Architect and signed by the District and the Architect, directing a change in the Work and stating a proposed basis for adjustment, if any, in the Contract Sum or Contract Time, or both. The District may by Construction Change Directive, without invalidating the Contract, order changes in the Work within the general scope of the Contract consisting of additions, deletions, or other revisions within. If applicable, the Contract Sum and Contract Time will be adjusted accordingly. In the case of a Construction Change Directive being issued, Contractor must commence Work immediately or delays from failure to perform Construction Change Directive shall be the responsibility of Contractor. Any dispute as to the sum of Construction Change Directive or timing of payment, shall be resolved pursuant to Paragraph 4.5.

7.3.2 Use to Direct Change

A Construction Change Directive shall be used in the absence of agreement on the terms of a CO. A copy of a proposed form is provided at the end of this Article.

7.4 REQUEST FOR INFORMATION ("RFI")

7.4.1 Definition.

An RFI is a written request prepared by the Contractor requesting the District to provide additional information necessary to clarify or amplify an item which the Contractor believes is not clearly shown or

called for in the drawings or specifications, or to address problems which have arisen under field conditions.

7.4.2 Scope.

The RFI shall reference all the applicable Contract Documents including specification section, detail, page numbers, drawing numbers, and sheet numbers, etc. The Contractor shall make suggestions and interpretations of the issue raised by the RFI. An RFI cannot modify the Contract Sum, Contract Time, or the Contract Documents.

7.4.3 Response Time.

The Architect must respond to a RFI within a reasonable time after receiving such request. If the Architect's response results in a change in the Work, then such change shall be effected by a written CO or Construction Change Directive, if appropriate. If the Architect cannot respond to the RFI within a reasonable time, the Architect shall notify the Contractor, with a copy to the Inspector and the District, of the amount of time that will be required to respond.

7.4.4 Costs Incurred.

The Contractor shall be responsible for any costs incurred for professional services, which shall be deducted from the next progress payment, if an RFI requests an interpretation or decision of a matter where the information sought is equally available to the party making such request. District, at its sole discretion, shall invoice Contractor for all such professional services arising from this Article.

7.5 REQUEST FOR PROPOSAL ("RFP")

7.5.1 Definition.

An RFP is a written request prepared by the Architect requesting the Contractor to submit to the District and the Architect an estimate of the effect of a proposed change on the Contract Sum and the Contract Time.

7.5.2 Scope.

An RFP shall contain adequate information, including any necessary drawings and specifications, to enable Contractor to provide the cost breakdowns required by Paragraph 7.7. The Contractor shall not be entitled to any Additional Compensation for preparing a response to an RFP, whether ultimately accepted or not.

7.6 CHANGE ORDER REQUEST ("COR")

7.6.1 Definition.

A COR is a written request prepared by the Contractor requesting that the District and the Architect issue a CO based upon a proposed change called for in an RFP or a claim pursuant to Paragraph 4.5.

7.6.2 Changes in Sum.

A COR shall include breakdowns per Paragraph 7.7 to validate any change in Contract Sum due to proposed change or claim.

7.6.3 Changes in Time.

A COR shall also include any additional time required to complete the Project. Any additional time requested shall not be the number of days to make the proposed change, but must be based upon the impact to the Project Schedule as defined in Paragraph 3.8 of the General Contract. If contractor fails to request a time extension in a COR, then the Contractor is thereafter precluded from requesting or claiming a delay.

7.7 COST OF CHANGE ORDERS

7.7.1 Scope.

Within ten (10) days after a request is made for a change that impacts the Contract Sum as defined in Paragraph 9.1, the critical path, or the Contract Time as defined in Paragraph 8.4.2, the Contractor shall provide the District and the Architect, with a written estimate of the effect of the proposed CO upon the Contract Sum and the actual cost of construction, which shall include a complete itemized cost breakdown of all labor and material showing actual quantities, hours, unit prices, and wage rates required for the change, and the effect upon the Contract Time of such CO. Changes may be made by District by an appropriate written CO, or, at the District's option, such changes shall be implemented immediately upon the Contractor's receipt of an appropriate written Construction Change Directive.

District may, as provided by law and without affecting the validity of this Agreement, order changes, modification, deletions and extra work by issuance of written Construction Change Directives from time to time during the progress of the Project, contract sum being adjusted accordingly. All such work shall be executed under conditions of the original Agreement except that any extension of time caused thereby shall be adjusted at time of ordering such change. District has discretion to order changes on a "time and material" basis with adjustments to time made after Contractor has justified through documentation the impact on the critical path of the Project.

7.7.2 Determination of Cost.

The amount of the increase or decrease in the Contract Price from a CO, if any, shall be determined in one or more of the following ways as applicable to a specific situation:

- (a) Mutual acceptance of a lump sum properly itemized and supported by sufficient substantiating data to permit evaluation. If an agreement cannot be reached within fifteen (15) days after submission and negotiation of Contractor's proposal, Contractor may submit pursuant to Paragraph 7.7.3. Submission of sums which have no basis in fact are at the sole risk of Contractor and may be a violation of the False Claims Act set forth under Government Code Section 12650 et. seq.);
- (b) By unit prices contained in Contractor's original bid and incorporated in the Project documents or fixed by subsequent agreement between District and Contractor;

(c) Cost to be determined in a manner agreed upon by the parties and a mutually acceptable fixed or percentage fee. However, in the case of disagreement, Contractor must utilize the procedure under section 7.7.3; or

(d) By cost of material and labor and percentage of overhead and profit. If the value is determined by this method the following requirements shall apply:

1. Basis for Establishing Costs.

a. Labor will be the actual cost for wages prevailing locally for each craft or type of workers at the time the extra Work is done, plus employer payments of payroll taxes and insurance, health and welfare, pension, vacation, apprenticeship funds, and other direct costs resulting from Federal, State, or local laws, as well as assessments or benefits required by lawful collective bargaining agreements. The use of a labor classification which would increase the extra Work cost will not be permitted unless the Contractor establishes the necessity for such additional costs. Labor costs for equipment operators and helpers shall be reported only when such costs are not included in the invoice for equipment rental.

b. Materials shall be at invoice or lowest current price at which such materials are locally available and delivered to the Site in the quantities involved, plus sales tax, freight, and delivery.

The District reserves the right to approve materials and sources of supply or to supply materials to the Contractor if necessary for the progress of the Work. No markup shall be applied to any material provided by the District.

c. Tool and Equipment Rental. No payment will be made for the use of tools which have a replacement value of **\$250** or less.

Regardless of ownership, the rates to be used in determining equipment rental costs shall not exceed listed rates prevailing locally at equipment rental agencies or distributors at the time the Work is performed.

The rental rates paid shall include the cost of fuel, oil, lubrication, supplies, small tools, necessary attachments, repairs and maintenance of any kind, depreciation, storage, insurance, and all incidentals.

Necessary loading and transportation costs for equipment used on the extra Work shall be included. If equipment is used intermittently and, when not in use, could be returned to its rental source at less expense to the District than holding it at the Work Site, it shall be returned unless the Contractor elects to keep it at the Work Site at no expense to the District.

All equipment shall be acceptable to the Inspector, in good working condition, and suitable for the purpose for which it is to be used. Manufacturer's ratings

and modifications shall be used to classify equipment, and equipment shall be powered by a unit of at least the minimum rating recommended by the manufacturer.

d. Other Items. The District may authorize other items which may be required on the extra work. Such items include labor, services, material, and equipment which are different in their nature from those required by the Work, and which are of a type not ordinarily available from the Contractor or any of the Subcontractors. Invoices covering all such items in detail shall be submitted with the request for payment.

e. Invoices. Vendors' invoices for material, equipment rental, and other expenditures shall be submitted with the COR. If the request for payment is not substantiated by invoices or other documentation, the District may establish the cost of the item involved at the lowest price which was current at the time of the Daily Report.

f. Overhead. Overhead, including direct and indirect costs, shall be submitted with the COR and include: home office overhead, off-site supervision, CO preparation/negotiation/research, time delays, project interference and disruption, additional guaranty and warranty durations, on-site supervision, additional temporary protection, additional temporary utilities, additional material handling costs, and additional safety equipment costs.

7.7.3 Format for Proposed Cost Change.

The following format shall be used as applicable by the District and the Contractor to communicate proposed additions and deductions to the Contract. A copy of a proposed Construction Change Directive form is provided at the end of this Article.

	<u>EXTRA</u>	<u>CREDIT</u>
(a) Material (attach itemized quantity and unit cost plus sales tax)	_____	_____
(b) Labor (attach itemized hours and rates)	_____	_____
(c) Equipment (attach invoices)	_____	_____
(d) Subtotal	_____	_____
(e) If Subcontractor performed Work, add Subcontractor's overhead and profit to portions performed by Sub-contractor, not to exceed fifteen percent (15%) of item (d).	_____	_____

	<u>EXTRA</u>	<u>CREDIT</u>
(f) Liability and Property Damage Insurance, Worker's, Compensation Insurance, Social Security, and Unemployment Taxes, not to exceed as follows: FICA @ 6.2% - with a wage ceiling of \$84,900; Medicare @ 1.45% - no wage ceiling; FUTA @ .8% - with a wage ceiling of \$7,000; ETT and SUI @ 2.3% - with a wage ceiling of \$7,000; Workers' Compensation @ 5.94% ; Liability and Property Damage @ 2.5% . Total not-to-exceed is 19.19% . <i>(Note: Modifications to these percentages will be evaluated and possibly modified only on a case-by-case basis and only after proper proof of alternate percentages are documented and approved in advance. In addition, as wage ceilings are met, those corresponding percentages must drop from the "burden" calculations).</i>	_____	_____
(g) Subtotal	_____	_____
(h) General Contractor's Overhead and Profit: Not to exceed fifteen percent (15%) of Item (g) if Contractor performed the work. No more than five percent (5%) of Item (g) if Subcontractor performed the work. If work was performed by Contractor and Subcontractors, portions performed by Contractor shall not exceed fifteen percent (15%) if Item (g), and portions performed by Subcontractor shall not exceed five percent (5%) of Item (g)	_____	_____
(i) Subtotal	_____	_____
(j) Bond not to exceed one percent (1%) of Item (g)	_____	_____
(k) TOTAL	_____	_____
(l) Time	_____	_____

The undersigned Contractor approves the foregoing Construction Change Directive as to the changes, if any, and the contract price specified for each item and as to the extension of time allowed, if any, for completion of the entire work on account of said Construction Change Directive, and agrees to furnish all labor, materials and service and perform all work necessary to complete any additional work specified therein, for the consideration stated herein. It is understood that said Construction Change Directive shall be effective when approved by the Governing Board of the District.

It is expressly understood that the value of such extra Work or changes, as determined by any of the aforementioned methods, expressly includes any and all of the Contractor's costs and expenses, both direct and indirect, resulting from additional time required on the Project or resulting from delay to the Project. Any costs, expenses, damages or time extensions not included are deemed waived.

The Contractor expressly acknowledges and agrees that any change in the Work performed shall not be deemed to constitute a delay or other basis for claiming additional compensation based on theories including, but not limited to, acceleration, suspension or disruption to the Project.

7.7.4 Net Deductive Change Orders

All net deductive Change Order(s) must be prepared pursuant to Paragraph 7.7.3. Contractor will be allowed a maximum of 5% total profit and overhead. If subcontractor work is involved, subcontractors shall be entitled to a maximum of 5% profit and overhead on the deducted work. Any deviation from this Article shall not be allowed.

7.7.5 Discounts, Rebates, and Refunds.

For purposes of determining the cost, if any, of any change, addition, or omission to the Work hereunder, all trade discounts, rebates, refunds, and all returns from the sale of surplus materials and equipment shall accrue and be credited to the Contractor, and the Contractor shall make provisions so that such discounts, rebates, refunds, and returns may be secured, and the amount thereof shall be allowed as a reduction of the Contractor's cost in determining the actual cost of construction for purposes of any change, addition, or omissions in the Work as provided herein.

7.7.6 Accounting Records.

With respect to portions of the Work performed by COs and Construction Change Directives on a time-and-materials, unit-cost, or similar basis, the Contractor shall keep and maintain cost-accounting records satisfactory to the District, which shall be available to the District on the same terms as any other books and records the Contractor is required to maintain under the Contract Documents.

7.7.7 Notice Required.

If the Contractor desires to make a claim for an increase in the Contract Price, or any extension in the Contract Time for completion, it shall notify the District pursuant to Paragraph 4.5 and this Article. No claim shall be considered unless made in accordance with this subparagraph. Contractor shall proceed to execute the Work even though the adjustment may not have been agreed upon. Any change in the Contract Price or extension of the Contract Time resulting from such claim shall be authorized by a CO.

7.7.8 Applicability to Subcontractors.

Any requirements under this Article 7 shall be equally applicable to COs or Construction Change Directives issued to Subcontractors by the Contractor to the same extent required by the Contractor.

7.7.9 Alteration to Change Order Language.

Contractor shall not alter Change Orders or reserve time in Construction Change Directives. Contractor shall execute finalized Change Orders and proceed under Paragraph 7.7.7 and Paragraph 4.5 with proper notice. If Contractor intends to reserve time, without an approved CPM schedule prepared pursuant to Paragraph 3.8 then Contractor may be prosecuted pursuant to the False Claim Act.

ARTICLE 8

TIME

8.1 DEFINITIONS

8.1.1 Contract Time.

Unless otherwise provided, Contract Time is the period of time, in calendar days, including authorized adjustments, allotted in the Contract Documents for Completion of the Work.

8.1.2 Notice to Proceed.

District may give a notice to proceed within three (3) months of the award of the bid by District. Once Contractor has received the notice to proceed, Contractor shall complete the Work in the period of time referenced in the Contract Documents.

In the event that District desires to postpone the giving of the notice to proceed beyond this two-month period, it is expressly understood that with reasonable notice to the Contractor, the giving of the date to proceed may be postponed by District. It is further expressly understood by Contractor, that Contractor shall not be entitled to any Claim of additional compensation as a result of the postponement of the giving of the notice to proceed

If the Contractor believes that a postponement will cause a hardship to Contractor, Contractor may terminate the contract with written notice to District within 10 days after receipt by Contractor of District's notice of postponement. It is further understood by Contractor that in the event that Contractor terminates the Contract as a result of postponement by the District, the District shall only be obligated to pay Contractor for the Work that Contractor had performed at the time of notification of postponement. Should Contractor terminate the contract as a result of a notice of postponement, District shall have the authority to award the contract to the next lowest responsible bidder.

8.1.3 Computation of Time.

The term "day" as used in the Contract Documents shall mean calendar day unless otherwise specifically defined.

The Contractor will only be allowed a time extension for unusually severe weather if it results in precipitation or other conditions which in the amount, frequency, or duration is in excess of the norm at the location and time of year in question as established by National Oceanic and Atmospheric Administration (NOAA) weather data. No less than **three** work days allocated equally across the Contract Time will be identified as non-working weather days in the contractor's schedule for the entire contract period of performance. The weather days shall be shown on the schedule and if not used will become float for the Project's use. A day-for-day extension will only be allowed for those days in excess of the norm. The Contractor is expected to work seven (7) days per week (if necessary, irrespective of inclement weather), to maintain access, and to protect the Work under construction from the effects of inclement weather.

If the weather is unusually severe and is in excess of the NOAA data norm and prevents the Contractor from beginning work at the usual daily starting time, or prevents the Contractor from proceeding with seventy-five (75%) of the normal labor and equipment force towards completion of the day's current controlling item on the accepted construction schedule for a period of at least five hours, and the crew is dismissed as a result thereof, the Architect will designate such time as unavoidable delay and grant one (1) work-day extension.

8.2 HOURS OF WORK.

8.2.1 Sufficient Forces.

Contractors and Subcontractors shall continuously furnish sufficient forces to ensure the prosecution of the Work in accordance with the Construction Schedule.

8.2.2 Performance During Working Hours.

Work shall be performed during regular working hours as permitted by the District except that in the event of an emergency, or when required to complete the Work in accordance with job progress, Work may be performed outside of regular working hours with the advance written consent of the District and approval of any required governmental agencies.

8.2.3 Costs for After Hours Inspections.

If the Contract Documents require Work to be done outside the Inspector's regular working hours, the costs of any after hour inspections, shall be borne by the District.

If the District allows the Contractor to do Work outside regular working hours for the Contractor's convenience, or if required to maintain schedule, the costs of any inspections required outside regular working hours shall be invoiced to the Contractor by the District and deducted from the next Progress Payment.

If the Contractor elects to perform Work outside the Inspector's regular working hours, costs of any inspections required outside regular working hours shall be invoiced to the Contractor by the District and deducted from the next Progress Payment.

8.3 PROGRESS AND COMPLETION.

8.3.1 Time of the Essence.

Time limits stated in the Contract Documents are of the essence to the Contract. By executing the Agreement, the Contractor confirms that the Contract Time is a reasonable period for performing the Work.

8.4 EXTENSIONS OF TIME – LIQUIDATED DAMAGES

8.4.1 Liquidated Damages.

Contractor and District hereby agree that the exact amount of damages for failure to complete the Work within the time specified is extremely difficult or impossible to determine. If the Work is not

completed within the time specified in the Contract Documents, it is understood that the District will suffer damage. It being impractical and unfeasible to determine the amount of actual damage, it is agreed the Contractor shall pay to District as fixed and liquidated damages, and not as a penalty, the amount specified in the Construction Agreement for each calendar day of delay in completion. Any liquidated damages recovered by the District shall not, however, limit the District's right to separately recover any actual out-of-pocket damages it suffers due to Contractor's delay. Contractor and his surety shall be liable for the amount thereof pursuant to Government Code section 53069.85.

8.4.2 Excusable Delay.

Contractor shall not be charged for liquidated damages because of any delays in completion of Work which are not the fault or negligence of Contractor or its subcontractors, including acts of God, as defined in Public Contract Code Section 7107, acts of enemy, epidemics and quarantine restrictions. Contractor shall within five (5) calendar days of beginning of any such delay notify District in writing of causes of delay; thereupon District shall ascertain the facts and extent of delay and grant extension of time for completing Work when, in its judgment, the findings of fact justify such an extension. Extensions of time shall apply only to that portion of Work affected by delay, and shall not apply to other portions of Work not so affected. An extension of time may only be granted after proper compliance with Paragraph 3.8 requiring preparation and submission of a properly prepared CPM schedule.

No extended overhead, general conditions costs, impact costs, out-of-sequence costs or any other type of compensation, by any name or characterization, shall be paid to the Contractor for any delay to any activity not designated as a critical path item on the latest approved Project schedule.

The Contractor shall notify the District and Architect in writing of any anticipated delay and its cause, in order that the District and Architect may take immediate steps to prevent, if possible, the occurrence or continuance of delay, and may determine whether the delay is to be considered avoidable or unavoidable, how long it continues, and to what extent the prosecution and completion of the Work might be delayed thereby.

In the event the Contractor requests an extension of Contract time for unavoidable delay, such request shall be submitted in accordance with the provisions in the Contract Documents governing changes in work. When requesting time, i.e., extensions, for proposed Change Orders, they must be submitted with the proposed Change Order with full justification and documentation. If the Contractor fails to submit justification with the proposed Change Order it waives its right to a time extension at a later date. Such justification must be based on the District accepted construction schedule as updated at the time of occurrence of the delay or execution of Work related to any changes to the scope of work. The justification must include, but is not limited to, the following information:

- (a) The duration of the activity relating to the changes in the Work and the resources (manpower, equipment, material, etc.) required to perform these activities within the stated duration.
- (b) Logical ties to the District accepted construction schedule for the proposed changes and/or delay showing the activity/activities in the schedule whose start or completion dates are affected by the change and/or delay. (A fragment of any delay of over ten (10) days must be provided.)

The Contractor and District understand and expressly agree that insofar as Public Contract Code Section 7102 may apply to changes in the Work or delays under this contract, the actual delays and damages, if any, and time extensions are intended to, and shall provide, the exclusive and full method of compensation for changes in the Work and construction delays.

8.4.3 Notice by Contractor Required.

The Contractor shall within five (5) calendar days of beginning of any such delay notify the District in writing of causes of delay with justification and supporting documentation. District will then ascertain the facts and extent of the delay and grant an extension of time for completing the Work when, in its judgment, the findings of fact justify such an extension. Extensions of time shall apply only to that portion of the Work affected by the delay and shall not apply to other portions of the Work not so affected. The sole remedy of Contractor for extensions of time under Paragraph 8.4.2 shall be an extension of the Contract Time at no cost to the District.

Claims relating to time extensions shall be made in accordance with applicable provisions of Article 7.

8.4.4 No Additional Compensation for Delays within Contractor's Control

CONTRACTOR IS AWARE THAT GOVERNMENTAL AGENCIES, SUCH AS THE DEPARTMENT OF GENERAL SERVICES, GAS COMPANIES, ELECTRICAL UTILITY COMPANIES, WATER DISTRICTS AND OTHER AGENCIES MAY HAVE TO APPROVE CONTRACTOR PREPARED DRAWINGS OR APPROVE A PROPOSED INSTALLATION. CONTRACTOR HAS INCLUDED DELAYS AND DAMAGES WHICH MAY BE CAUSED BY SUCH AGENCIES IN CONTRACTOR'S BID. THUS, CONTRACTOR IS NOT ENTITLED TO MAKE CLAIM UPON THE DISTRICT FOR DAMAGES OR DELAYS ARISING FROM THE DELAYS CAUSED BY SUCH AGENCIES. FURTHERMORE, THE CONTRACTOR HAS SCHEDULED FOR SUCH DELAYS AND IS NOT ENTITLED TO AN EXTENSION OF TIME FOR DELAYS CAUSED BY GOVERNMENTAL AGENCIES WHICH CONTRACTOR MUST OBTAIN APPROVALS FROM AND, THUS, CONTRACTOR IS NOT ENTITLED TO AN EXTENSION OF TIME.

CONTRACTOR SHALL ONLY BE ENTITLED TO COMPENSATION FOR DELAY WHEN THE FOLLOWING CONDITIONS ARE MET: (1) THE DISTRICT IS RESPONSIBLE FOR THE DELAY; (2) THE DELAY IS UNREASONABLE UNDER THE CIRCUMSTANCES INVOLVED; AND (3) THE DELAY WAS NOT WITHIN THE CONTEMPLATION OF DISTRICT AND CONTRACTOR.

ARTICLE 9

PAYMENTS AND COMPLETION

9.1 CONTRACT SUM

The Contract Sum is stated in the Agreement and, including authorized adjustments, is the total amount payable by the District to the Contractor for performance of the Work under the Contract Documents.

9.2 COST BREAKDOWN

9.2.1 Required Information.

On forms or software programs (e.g., Microsoft Project, Primavera or Excel) approved by the District, the Contractor shall furnish the following:

- (a) Within ten (10) days of the award of the Contract, a detailed breakdown of the Contract Sum (hereinafter "Schedule of Values" or "SOV") for each Project or Site;
- (b) Within ten (10) days of the award of the Contract, a schedule of estimated monthly payment requests due the Contractor showing the values and construction time of the various portions of the Work to be performed by it and by its Subcontractors or material and equipment suppliers containing such supporting evidence as to its correctness as the District may require;
- (c) Within ten (10) days of the award of the Contract, the name, address, telephone number, telecopier number, California State Contractors License number, classification and monetary value of all Subcontracts for parties furnishing labor, material, or equipment for completion of the Project.

9.2.2 District Approval Required.

The District shall review all submissions received pursuant to Paragraph 9.2.1 in a timely manner. All submissions must be approved by the District before becoming the basis of any payment. Contractor may request to District representation, prior to submission, to submit information required by paragraph 9.2.1 in a spreadsheet (Microsoft Excel) format. Approval of an alternate format is entirely at District's discretion.

9.3 PROGRESS PAYMENTS

9.3.1 Payments to Contractor.

Within thirty (30) days after approval of the Request for Payment, Contractor shall be paid a sum equal to ninety-five percent (95%) of the value of the Work performed (as certified by Architect and Inspector and verified by Contractor) up to the last day of the previous month, less the aggregate of previous payments. The value of the Work completed shall be Contractor's best estimate. No inaccuracy or error in said estimate shall operate to release the Contractor, or any surety upon any bond, from damages arising from such Work, or from the District's enforcement of each and every provision of this Contract, and the District shall have the right subsequently to correct any error made in any estimate for payment.

The Contractor shall not be entitled to have any payment requests processed, or be entitled to have any payment made for work performed, so long as any lawful or proper direction given by the District concerning the Work, or any portion thereof, remains incomplete.

The SOV items of Work shall include a prorated portion of Contractor's home office and field office overhead, profit, insurance, (except to the extent expressly identified in a Proposal Item) and/or other financing, as well as General Conditions costs, (e.g., routine time related Site cleanup and maintenance,, temporary power and lighting, security, temporary trailer rental, temporary fence rentals, and the like).

The SOV shall also **not** include separate line items to prepare submittals, or other Work items not at the Project Site, unless expressly identified in these Contract Documents as specific exceptions.

Costs for each item of Work at the Project site shall be indicated on a single line that breaks out labor, materials, and equipment for that item of Work, with all items noted in the paragraph above prorated into each line. Unless otherwise allowed, the SOV shall reflect that the District shall only pay for installed items of Work at the Project site. All other costs shall be prorated through all activities and all Phases of the Project so that the sum of all Schedule of Values line items equals the total Contract Sum.

Notwithstanding anything to the contrary stated above, the Contractor may include in its Request for Payment the value of any fabricated structural steel, mail order materials, G.F.R.C. panels and other such custom-made materials prepared specifically for the Project and unique to the Project so long as all of the following requirements are satisfied:

- (a) No payment shall be made for materials stored off-site without the written approval of the District to be given or withheld in the District's sole discretion;
- (b) Title to such materials shall be vested in the District as evidenced by documentation satisfactory in form and substance to the District, including, without limitation, recorded financing statements, UCC filings and UCC searches;
- (c) With each Contractor Request for Payment, the Contractor shall submit to the District a written list identifying each location where materials are stored off-site (which must be a bonded warehouse) and the value of the materials at each location. The Contractor shall procure insurance satisfactory to the District (in its reasonable discretion) for materials stored off-site in an amount not less than the total value thereof;
- (d) The consent of any Surety shall be obtained to the extent required prior to payment for any materials stored off-site;
- (e) Representatives of the District shall have the right to make inspections of the storage areas at any time; and
- (f) Such materials shall be (1) protected from diversion, destruction, theft and damage to the reasonable satisfaction of the District; (2) specifically marked for use on the Project; and (3) segregated from other materials at the storage facility.

9.3.2 Purchase of Materials and Equipment.

The Contractor is required to order, obtain, and store materials and equipment sufficiently in advance of its Work at no additional cost or advance payment from District to assure that there will be no delays.

9.3.3 No Waiver.

No payment by District hereunder shall be interpreted so as to imply that District has inspected, approved, or accepted any part of the Work. Notwithstanding any payment, the District may enforce each and every provision of this Contract. The District may correct any error subsequent to any payment.

9.3.4 Issuance of Certificate of Payment.

The Architect shall, within seven (7) days after receipt of the Contractor's Application for Payment, either approve such payment or notify the Contractor in writing of the Architect's reasons for withholding approval in whole or in part as provided in Paragraph 9.6. The review of the Contractor's Application for Payment by the Architect is based on the Architect's observations at the Site and the data comprising the Application for Payment that the Work has progressed to the point indicated and that, to the best of the Architect's knowledge, information, and belief, the quality of the Work is in accordance with the Contract Documents. The foregoing representations are subject to (1) an evaluation of the Work for conformance with the Contract Documents, (2) results of subsequent tests and inspections, (3) minor deviations from the Contract Documents correctable prior to completion, and (4) specific qualifications expressed by the Architect. The issuance of a Certificate for Payment will further constitute a representation that the Contractor is entitled to payment in the amount certified.

9.4 APPLICATIONS FOR PROGRESS PAYMENTS

9.4.1 Procedure.

9.4.1.1 *Application for Progress.* On or before the fifth (5th) day of each calendar month during the progress of the Work, Contractor shall submit to the Architect an itemized Application for Progress Payment for operations completed in accordance with the Schedule of Values. Such application shall be notarized, if required, and supported by the following or such portion thereof as Architect requires:

- (a) The amount paid to the date of the Application to the Contractor, to all its Subcontractors, and all others furnishing labor, material, or equipment for its Contract;
- (b) The amount being requested under the Application for Payment by the Contractor on its own behalf and separately stating the amount requested on behalf of each of the Subcontractors and all others furnishing labor, material, and equipment under the Contract;
- (c) The balance that will be due to each of such entities after said payment is made;
- (d) A certification that the As-Built Drawings and Annotated Specifications are current;
- (e) Itemized breakdown of work done for the purpose of requesting partial payment;
- (f) An updated construction schedule in conformance with Paragraph 3.8;
- (g) The additions to and subtractions from the Contract Sum and Contract Time;
- (h) A summary of the retentions held;
- (i) Material invoices, evidence of equipment purchases, rentals, and other support and details of cost as the District may require from time to time;
- (j) The percentage of completion of the Contractor's Work by line item; and

- (k) An updated Schedule of Values from the preceding Application for Payment.

9.4.2 Prerequisites for Progress Payments.

9.4.2.1 *First Payment Request.* The following items, if applicable, must be completed before the first payment request will be accepted for processing:

- (a) Installation of the Project sign;
- (b) Receipt by Architect of submittals;
- (c) Installation of field office;
- (d) Installation of temporary facilities and fencing;
- (e) Submission of documents listed in the Paragraph 9.2 relating to Cost Breakdown;
- (f) Contractor's Construction Schedule (Schedule to be CPM based in conformance with Paragraph 3.8);
- (g) Schedule of unit prices;
- (h) Submittal Schedule;
- (i) Copies of necessary permits;
- (j) Copies of authorizations and licenses from governing authorities;
- (k) Initial progress report;
- (l) Surveyor qualifications;
- (m) Written acceptance of District's survey of rough grading;
- (n) List of all subcontractors, with names, license numbers, telephone numbers, and scope of work;
- (o) All bonds and insurance endorsements; and
- (p) Resumes of General Contractor's Project Manager and superintendent.

9.4.2.2 *All Payment Requests.* No payment requests will be processed unless Contractor has submitted copies of the Certified Payroll records for the Work which correlates to the payment request and a proper CPM schedule pursuant to Paragraph 3.8 is submitted.

9.4.2.3 Any payments made to Contractor where criteria set forth in Paragraph 9.4.2.1 or 9.4.2.2 have not been met shall not constitute a waiver of said criteria by District. Instead, such payment shall be construed as a good faith effort by District to resolve differences so Contractor may pay its Subcontractors and suppliers and that Contractor agrees that failure to submit such items may constitute a breach of contract by Contractor and may subject Contractor to termination.

9.5 WARRANTY OF TITLE

The Contractor warrants title to all work. The Contractor further warrants that all work is free and clear of liens, claims, security interests, or encumbrances in favor of the Contractor, Subcontractors, material and equipment suppliers, or other persons or entities making a claim by reason of having provided labor, materials, and equipment relating to the Work. Failure to keep work free of liens, claims,

security interests or encumbrances is grounds to make a claim against Contractor's payment and performance bond to immediately remedy and defend.

If a lien or stop notice of any nature should at any time be filed against the Work or any District property, by any entity which has supplied material or services at the request of the Contractor, Contractor and Contractor's surety shall promptly, on demand by District and at Contractor's and surety's own expense, take any and all action necessary to cause any such lien or stop notice to be released or discharged immediately therefrom.

If the Contractor fails to furnish to the District within ten (10) calendar days after demand by the District, satisfactory evidence that a lien or stop notice has been so released, discharged, or secured, then District may discharge such indebtedness and deduct the amount required therefor, together with any and all losses, costs, damages, and attorney's fees and expense incurred or suffered by District from any sum payable to Contractor under the Contract.

9.6 DECISIONS TO WITHHOLD PAYMENT

9.6.1 Reasons to Withhold Payment.

The District may withhold payment in whole, or in part, to the extent reasonably necessary to protect the District if, in the District's opinion, the representations to the District required by Paragraph 9.4 cannot be made. The District may withhold payment, in whole, or in part, to such extent as may be necessary to protect the District from loss because of, but not limited to:

- (a) Defective Work not remedied;
- (b) Stop Notices served upon the District;
- (c) Liquidated damages assessed against the Contractor;
- (d) The cost of completion of the Contract if there exists reasonable doubt that the Work can be completed for the unpaid balance of any Contract Sum or by the completion date;
- (e) Damage to the District or other contractor;
- (f) Unsatisfactory prosecution of the Work by the Contractor;
- (g) Failure to store and properly secure materials;
- (h) Failure of the Contractor to submit on a timely basis, proper and sufficient documentation required by the Contract Documents, including, without limitation, acceptable monthly progress schedules, shop drawings, submittal schedules, schedule of values, product data and samples, proposed product lists, executed Construction Change Directives, and verified reports;
- (i) Failure of the Contractor to maintain As-Built drawings;
- (j) Erroneous estimates by the Contractor of the value of the Work performed, or other false statements in an Application for Payment;
- (k) Unauthorized deviations from the Contract Documents;

- (l) Failure of the Contractor to prosecute the Work in a timely manner in compliance with established progress schedules and completion dates.
- (m) Failure to properly pay prevailing wages as defined in Labor Code section 1720, et seq.;
- (n) Failure to properly maintain or clean up the Site;
- (o) Payments to indemnify, defend, or hold harmless the District;
- (p) Any payments due to the District including but not limited to payments for failed tests, or utilities changes or permits;
- (q) Failure to submit an acceptable schedule in accordance with Paragraph 3.8; or
- (r) Failure to pay Subcontractor or suppliers as required by Paragraph 9.8.1.

9.6.2 Reallocation of Withheld Amounts.

District may, in its discretion, apply any withheld amount to payment of outstanding claims or obligations as defined in Paragraphs 9.6.1 and 9.5. In so doing, District shall make such payments on behalf of Contractor. If any payment is so made by District, then such amount shall be considered as a payment made under Contract by District to Contractor and District shall not be liable to Contractor for such payments made in good faith. Such payments may be made without prior judicial determination of claim or obligation. District will render Contractor an accounting of such funds disbursed on behalf of Contractor.

If Contractor defaults or neglects to carry out the Work in accordance with the contract documents or fails to perform any provision thereof, District may, after ten (10) calendar days written notice to the Contractor and without prejudice to any other remedy make good such deficiencies. The District shall adjust the total Contract price by reducing the amount thereof by the cost of making good such deficiencies. If District deems it inexpedient to correct Work which is damaged, defective, or not done in accordance with Contract provisions, an equitable reduction in the Contract price (of at least 150% of the estimated reasonable value of the nonconforming work) shall be made therefor.

9.6.3 Payment After Cure.

When the grounds for declining approval are removed, payment shall be made for amounts withheld because of them. No interest shall be paid on any retainage or amounts withheld due to the failure of the Contractor to perform in accordance with the terms and conditions of the Contract Documents.

9.7 NONCONFORMING WORK

Contractor shall promptly remove from premises all Work identified by District as failing to conform to the Contract whether incorporated or not. Contractor shall promptly replace and re-execute its own Work to comply with the Contract without additional expense to District and shall bear the expense of making good all work of other contractors destroyed or damaged by such removal or replacement.

If Contractor does not remove such Work which has been identified by District as failing to conform to the Contract Documents within a reasonable time, fixed by written notice, District may remove

it and may store the material at Contractor's expense. If Contractor does not pay expenses of such removal within ten (10) calendar days' time thereafter, District may, upon ten (10) calendar days' written notice, sell such materials at auction or at private sale and shall account for net proceeds thereof, after deducting all costs and expenses that should have been borne by Contractor.

9.8 SUBCONTRACTOR PAYMENTS

9.8.1 Payments to Subcontractors.

No later than ten (10) days after receipt, or pursuant to Business and Professions Code Section 7108.5 and Public Contract Code section 7107, the Contractor shall pay to each Subcontractor, out of the amount paid to the Contractor on account of such Subcontractor's portion of the Work, the amount to which said Subcontractor is entitled. The Contractor shall, by appropriate agreement with each Subcontractor, require each Subcontractor to make payments to Sub-subcontractors in a similar manner.

9.8.2 No Obligation of District for Subcontractor Payment.

The District shall have no obligation to pay, or to see to the payment of, money to a Subcontractor except as may otherwise be required by law.

9.8.3 Payment Not Constituting Approval or Acceptance.

An approved Request for Payment, a progress payment, or partial or entire use or occupancy of the Project by the District shall not constitute acceptance of Work not in accordance with the Contract Documents.

9.8.4 Joint Checks.

District shall have the right, if necessary for the protection of the District, to issue joint checks made payable to the Contractor and Subcontractors and material or equipment suppliers. The joint check payees shall be responsible for the allocation and disbursement of funds included as part of any such joint payment. In no event shall any joint check payment be construed to create any contract between the District and a Subcontractor of any tier, any obligation from the District to such Subcontractor, or rights in such Subcontractor against the District.

9.9 PROJECT AS-BUILT DOCUMENTS

This section includes administrative and procedural requirements for Project As-Built Documents, including but not limited to the following where applicable:

9.9.1 As-Built Drawings

9.9.2 As-Built Specifications

9.9.3 As-Built Product Data

9.9.4 As-Built MEP & Structural coordination documents

9.9.5 Project As-Built Documents include, but are not limited to, the following:

9.9.5.1 Marked-up copies of Drawings

9.9.5.2 Marked up copy of the Project Specifications

- 9.9.5.3 Marked-up copies of Shop Drawings
- 9.9.5.4 Newly prepared Drawings and Specifications
- 9.9.5.5 Marked-up Product Data submittals
- 9.9.5.6 Field records, such as photographs, for variable and concealed conditions
- 9.9.5.7 Record information for Work that is only schematically shown
- 9.9.5.8 Maintenance forms for equipment

Contractor shall dedicate one complete full size set of the Contract Drawings and one complete Project Manual for use in recording as-built conditions.

Contractor shall submit to District in hard copy one original and two copies of all Project As-Built Documents. In addition, one electronic copy in electronic media format shall be submitted to District. District reserves the right to require resubmittal in accordance with these General Conditions if the documents are inaccurate or incomplete, or otherwise fail to meet the requirements of these Contract Documents.

9.9.6 Project As-Built

Mark-up Procedure: During the construction period, maintain a complete, current set of full size blackline prints of Contract Drawings and Shop Drawings for Project As-Built Documents purposes. Label each document (on first sheet or format page) "As-Built" in 2-inch high printed letters. Keep all As-Built documents current.

A reference by number to a Change Order, CCD, RFI, RFQ, RFP, Field Order or other such document is not acceptable as sufficient record information on any record document. Do not conceal any Work until required record information has been recorded.

Contractor shall mark As-Built drawings to indicate the actual installation where the installation varies appreciably from the installation shown originally. Give particular attention to information on concealed elements that would be difficult to identify or measure and record later. Items required to be marked include, but are not limited to:

- 9.9.6.1 Dimensional changes to the Contract Drawings (horizontal and/or vertical)
- 9.9.6.2 Revisions or any modification to details shown on the Contract Drawings
- 9.9.6.3 Depths of various elements of foundations in relation to main floor level or survey datum.
- 9.9.6.4 Horizontal and vertical location of underground utilities and appurtenances referenced to permanent surface improvements.
- 9.9.6.5 Location of internal utilities and appurtenances concealed in construction referenced to visible and accessible features of structure.
- 9.9.6.6 Locations of underground work, points of connection with existing utilities, changes in direction, valves, manholes, catch basins, capped stub outs, invert elevations and similar items

- 9.9.6.7 Final, actual numbering of each electrical circuit
- 9.9.6.8 Revisions to routing of piping and conduits
- 9.9.6.9 Revisions to electrical circuitry
- 9.9.6.10 Actual equipment locations
- 9.9.6.11 Duct size and routing
- 9.9.6.12 Changes made by Change Order, CCD, ASI, or any other directive
- 9.9.6.13 Details not on original Contract Drawings

Contractor shall mark completely and accurately As-Built Drawing prints of Contract Drawings or Shop Drawings, whichever is the most capable of showing actual physical conditions. Where Shop Drawings are marked, show cross-reference on Contract Drawings location.

Contractor shall mark As-Built Drawing sets with red, erasable colored pencil; use other colors to distinguish between changes for different categories of the Work at the same location.

Contractor shall be responsible for Mark-up: Where feasible, the individual or entity who obtained As-Built Drawing data, whether the individual or entity is the installer, Subcontractor or similar entity, is required to prepare the mark-up on As-Built Drawings.

Contractor shall prepare As-Built Drawings: Immediately prior to inspection for Certification of Substantial Completion of the Work, review completed marked-up As-Built Drawings with District, Project Inspector, Construction Manager, and Architect to ensure accuracy of information. Once accuracy of information is confirmed, prepare and submit a full set of As-Built Contract Drawings and Shop Drawings.

Incorporate changes and additional information previously marked on print sets. Delete, redraw, and/or add details and notations where applicable. Identify and date each Drawing; include the printed designation "PROJECT AS-BUILT DRAWING" and the date prepared in a prominent location on each Drawing.

Distribution: Whether or not changes and additional information were recorded, organize and bind original marked-up set of prints that were maintained during the construction period into manageable sets. Bind the set with durable paper cover sheets, with appropriate identification, including titles, dates and other information on cover sheets and submit to District.

9.9.7 Project As-Built Specification

Contractor shall, during the construction period, maintain one copy of the Project Specifications, including all addenda and all other modifications issued for Project As-Built Documents purposes.

Contractor shall mark the Project As-Built specifications to indicate the actual installation where the installation varies substantially from that indicated in Specifications and/or modifications issued. Note related Project As-Built Drawing information, where applicable. Give particular attention to substitutions, selection of product options, Change Order and Construction Change Directive Work, and information on concealed installation that would be difficult to identify, measure, and record later.

9.9.8 Project As-Built Product Data

Contractor shall, during the construction period, maintain one copy of each Project As-Built Product Data submittal for "Project As-Built Document" purposes.

Contractor shall arrange Project As-Built Product Data by Specification Section number, and provide names, addresses, fax numbers, emails addresses, and telephone number of Subcontractors and suppliers. Information to be provided includes:

- 9.9.8.1 Trade Names
- 9.9.8.2 Model or type numbers
- 9.9.8.3 Assembly diagrams
- 9.9.8.4 Operating instructions
- 9.9.8.5 Cleaning instructions
- 9.9.8.6 Maintenance instructions
- 9.9.8.7 Recommended spare parts
- 9.9.8.8 Product data

9.9.9 Miscellaneous Project As-Built Submittals

Refer to other Specification Sections for miscellaneous record keeping requirements and submittals. Immediately prior to Substantial Completion of the Work complete miscellaneous records and place in good order, properly identified, ready for use and reference. Submit to the District for District's records, in Adobe PDF format.

9.9.10 Electronic Media Format

Electronic Media Format: Electronic media format for all Project As-Built Documents shall be Adobe PDF, with chapter markers and/or bookmarks inserted in place of the equivalent hard copy section tabs. Electronic copy shall include all tables, charts, drawings, codes and all other matters reflected in hard copies. Electronic media files shall be delivered on a unique CD-ROM or flash drive.

9.10 COMPLETION OF THE WORK

9.10.1 Contract Closeout Submittals include, but are not limited to:

- 9.10.1.1 Electronic Media of All Project As-Built Documents described in Article 9.9.10 above.
- 9.10.1.2 Record Samples
- 9.10.1.3 Field records for variable and concealed conditions
- 9.10.1.4 Operating and maintenance manuals and data
- 9.10.1.5 Warranties, guaranties, and bonds
- 9.10.1.6 Warranty Tags

9.10.1.7 Spare Parts Data

9.10.1.8 Service and maintenance contracts

9.10.1.9 Certified and approved fire inspection documents, when required

9.10.2 Initial Punch List and Inspection

When Contractor considers Work to be Substantially Complete, submit written notice to District's Representative requesting an Initial Inspection and listing items remaining to be completed or corrected listed by room number and item number (hereinafter "Initial Punch List"). The Contractor and/or its Subcontractors shall proceed promptly to complete and correct items on the list without waiting for District review of the Initial Punch List and inspection of the Work. Failure to include an item on such list does not alter the responsibility of the Contractor to complete all Work in accordance with the Contract Documents.

The Contractor shall not submit a notice requesting an Initial Inspection unless the Work is Substantially Complete.

9.10.2.1 Before calling for final inspection, Contractor shall determine that the following Work has been performed:

- a. The Work has been completed.
- b. All life safety items are completed and in working order.
- c. Mechanical and electrical Work complete, fixtures in place, connected and ready for tryout and test.
- d. Electrical circuits scheduled in panels and disconnect switches labeled.
- e. Painting and special finishes complete.
- f. Doors complete with hardware, cleaned of protective film relieved of sticking or binding and in working order.
- g. Tops and bottoms of doors sealed.
- h. Floors waxed and polished as specified.
- i. Broken glass replaced and glass cleaned.
- j. Grounds cleared of Contractor's equipment, raked clean of debris, and trash removed from Site.
- k. Work cleaned, free of stains, scratches, and other foreign matter, replacement of damaged and broken material.
- l. Finished and decorative work shall have marks, dirt and superfluous labels removed.
- m. Final cleanup.

9.10.2.2 Furnish a letter to District stating that a responsible representative of District [give name and position] has been instructed in working characteristics of mechanical and electrical equipment.

Should District's Representatives determine that Work is not Substantially Complete, the Architect or Construction Manager will promptly notify Contractor in writing, listing Work that must be completed prior to Substantial Completion. Any inspection list that is submitted to the District that does not result in a District determination of Substantial Completion will not be considered an accepted Initial

Punch List. If the Work or Phase of Work is determined to not be Substantially Complete, Contractor shall complete all Work as directed prior to requesting an additional Initial Inspection by the District to determine Substantial Completion per this Specification Section.

Upon receipt of the Contractor's Initial Punch List, and not before, the Architect, Construction Manager, and Inspector will make an Initial Inspection to determine whether the Work, or Phase of Work, is Substantially Complete.

9.10.2.3 All fire and life safety items, manufactured units, equipment and systems that require startup must have been started, run, tested, and operational for periods prescribed by the Contract Documents before a request for Initial Inspection is accepted by the District.

9.10.2.4 If additional Initial Inspections are required to review Initial Punch List items due to incompleteness of the Work by Contractor, Contractor will reimburse District for all costs associated with these inspections if additional services fees by District consultants are required. The costs of such District additional service fees will be deducted from the Contract Sum by Change Order.

9.10.3 Substantial Completion

When District determines that the Work is Substantially Complete, District will issue a Certificate of Substantial Completion, accompanied by Final Punch List of items to be completed or corrected as verified and/or appended by Architect and District.

When the Work is Substantially Complete, the District will file a Notice of Completion.

9.10.3.1 Warranties required by the Contract Documents shall commence on the date of Substantial Completion of the Work unless otherwise provided in the Notice of Completion.

9.10.3.2 The Notice of Completion shall be submitted to the Contractor for their written acceptance of responsibilities assigned to them in such Notice prior to District filing the Notice of Completion for purposes of initiating the release of Retention for the Work or Phase of Work.

9.10.3.3 The District shall withhold from Contractor payment the value of remaining Work, Work to be corrected, incomplete Work, and an amount identified for Punch List Work, and as otherwise identified in Public Contract Code.

The Contractor shall complete the items listed in the Final Punch List within ten (10) working days of the Certificate of Substantial Completion. The Contractor shall execute the Work such that the District can occupy the Work within seven (7) calendar days of the date of the Certificate of Substantial Completion.

9.10.4 Final Inspection

When Contractor considers the items listed in the Final Punch List to be complete the Contractor shall submit written notice to District's Representative requesting a Final Inspection.

Operations and Maintenance Manuals and Warranty and Guaranty documents. At least ten (10) days prior to final inspection, three (3) copies of complete operations and maintenance manuals, repair parts lists, service instructions for all electrical and mechanical equipment, and equipment warranties shall be submitted. All installation, operating, and maintenance information and drawings shall be bound in 8½" x 11" binders. Provide a table of contents in front and all items shall be indexed with tabs. Each manual shall also contain a list of subcontractors, with their addresses and the names of persons to contact in cases of emergency. Identifying labels shall provide names of manufactures, their addresses, ratings, and capacities of equipment and machinery. Additional requirements for Operations and Maintenance manuals may be found in other Specifications and Sections of the Contract Documents.

Upon receipt of the Contractor's request for Final Inspection, and not before, the Contractor, Architect, and Construction Manager, shall meet to go over the Contract Documents to identify the administrative requirements for contract close-out.

9.10.4.1 The Construction Manager will prepare a list of requirements remaining for administrative close-out and shall provide the list to the Contractor. This list may be general in nature, and shall not serve to relieve the Contractor from any of the administrative requirements of the Contract.

9.10.4.2 The Contractor shall complete all items on the administrative close-out list within twenty-one (21) days

Subsequent to the meeting to identify administrative close-out requirements, Architect, Construction Manager, Campus Representatives, and Inspector will inspect the Work to determine whether the Work identified on the Final Punch List is complete.

If additional Final Inspections are required to review the Final Punch List items due to incompleteness of the Work by Contractor, Contractor will reimburse District for all costs associated with these inspections if additional services fees by District consultants are required. The costs of such District additional service fees will be deducted from the Contract Sum by Change Order.

When the Architect determines that all final punch list items have been completed, a final Project Inspection Report will be issued. Any outstanding administrative close-out requirements will be identified and a value for withholding from Progress Payment or Final Payment will be assigned.

The Project Inspector (IOR), the Construction Manager, and the Contractor shall, at all times, be together during all inspections. The Contractor shall give 24-hour notice to the District for such inspections.

9.10.5 Final Completion

Final Completion occurs when all Work meets all requirements of the Contract Documents. When Contractor considers all Work complete and all close-out requirements have been performed, submitted, and accepted, submit written certification to District that:

9.10.5.1 Contractor has inspected Work for compliance with Contract Documents, and all requirements for Final Acceptance have been met.

9.10.5.2 Except for Contractor maintenance and Deferred or Seasonal Testing, after Final Acceptance, all Work has been completed in accordance with Contract Documents and deficiencies listed with any Certificate of Substantial Completion have been corrected. Equipment and systems have been tested in the presence of Architect, Project Inspector (IOR), Construction Manager, and District Representatives and are operative.

Should District determine that the Work is incomplete or defective or that administrative requirements have not been completed:

9.10.5.3 District's Representative promptly will so notify Contractor, in writing, listing the incomplete or defective items.

9.10.5.4 Contractor shall promptly remedy all incomplete and/or defective Work and notify the District when it is ready for re-inspection. District's Representatives will then re-inspect the Work. If deficiencies previously noted are found not to be corrected, Contractor shall pay all District costs for the re-inspection.

9.10.5.5 When District determines that all Work and requirements are complete under the Contract Documents, District or Construction Manager will request Contractor to make a request for Final Payment.

9.11 PARTIAL OCCUPANCY OR USE

9.11.1 District's Rights.

The District may occupy or use any completed or partially completed portion of the Work at any stage. The District and the Contractor shall agree in writing to the responsibilities assigned to each of them for payments, security, maintenance, heat, utilities, damage to the Work, insurance, the period for correction of the Work, and the commencement of warranties required by the Contract Documents. If District and Contractor cannot agree as to responsibilities such disagreement shall be resolved pursuant to Paragraph 4.5.1. When the Contractor considers a portion complete, the Contractor shall prepare and submit a Punch List to the District as provided under Paragraph 9.9.1.

9.11.2 Inspection Prior to Occupancy or Use.

Immediately prior to such partial occupancy or use, the District, the Contractor, and the Architect shall jointly inspect the area to be occupied or portion of the Work to be used in order to determine and record the condition of the Work.

9.11.3 No Waiver.

Unless otherwise agreed upon, partial occupancy or use of a portion or portions of the Work shall not constitute acceptance of the Work not complying with the requirements of the Contract Documents.

9.12 COMPLETION AND FINAL PAYMENT

9.12.1 Final Inspection.

Contractor shall comply with all Punch List and Inspection procedures under Paragraph 9.10

Upon receipt and approval of such final Application for Payment as required in Article 9.10.5.5 and elsewhere, the Architect shall issue a final Certificate of Payment stating that to the best of its knowledge, information, and belief, and on the basis of its observations, inspections, and all other data accumulated or received by the Architect in connection with the Work, such Work has been completed in accordance with the Contract Documents. The District shall thereupon inspect such Work and either accept the Work as complete or notify the Architect and the Contractor in writing of reasons why the Work is not complete. Upon acceptance of the Work of the Contractor as fully complete (which, absent unusual circumstances, will occur when the Punch List items have been satisfactorily completed), the District shall record a Notice of Completion with the County Recorder, and the Contractor shall, upon receipt of payment from the District, pay the amounts due Subcontractors.

9.12.2 Retainage.

The retainage, less any amounts disputed by the District or which the District has the right to withhold Pursuant to Paragraph 9.6, shall be paid after approval of the District by the Architect's Certificate of Payment, after the satisfaction of the conditions set forth in Article 9, and after thirty-five (35) days after the acceptance of the Work and recording of the Notice of Completion by District. No interest shall be paid on any retainage, or on any amounts withheld due to a failure of the Contractor to perform, in accordance with the terms and conditions of the Contract Documents, except as provided to the contrary in any Escrow Agreement between the District and the Contractor pursuant to Public Contract Code § 22300.

9.12.3 Procedures for Application for Final Payment.

9.12.3.1 *Prerequisites for Final Payment.* The following conditions must be fulfilled prior to Final Payment:

- (a) A full and final waiver or release of all Stop Notices in connection with the Work shall be submitted by Contractor, including a release of Stop Notice in recordable form, together with (to the extent permitted by law) a copy of the full and final release of all Stop Notice rights.
- (b) The Contractor shall have made all corrections to the Work which are required to remedy any defects therein, to obtain compliance with the Contract Documents or any requirements of applicable codes and ordinances, or to fulfill any of the orders or directions of District required under the Contract Documents.
- (c) Each Subcontractor shall have delivered to the Contractor all written guarantees, warranties, applications, and bonds required by the Contract Documents for its portion of the Work.
- (d) Contractor must have completed all requirements set forth in Paragraph 9.9.1.2.

- (e) Architect shall have issued a Final Certificate of Payment.
- (f) The Contractor shall have delivered to the District all manuals and materials required by the Contract Documents.
- (g) The Contractor shall have completed final clean up as required by Paragraph 3.12.

9.13 SUBSTITUTION OF SECURITIES

The District will permit the substitution of securities in accordance with the provisions of Public Contract Code section 22300.

ARTICLE 10

PROTECTION OF PERSONS AND PROPERTY

10.1 SAFETY PRECAUTIONS AND PROGRAMS

10.1.1 Contractor Responsibility.

The Contractor is constructive owner of Project site. The Contractor shall be responsible for all damages to persons or property that occur as a result of its fault or negligence in connection with the prosecution of this Contract and shall take all necessary measures and be responsible for the proper care and protection of all materials delivered and work performed until completion and final acceptance by the District. All work shall be solely at the Contractor's risk, with the exception of damage to the work caused by "acts of God" as defined in Public Contract Code Section 7105(b)(2).

Contractor shall take, and require subcontractor to take, all necessary precautions for safety of workers on the Work and shall comply with all applicable federal, state, local and other safety laws, standards, orders, rules, regulations, and building codes to prevent accidents or injury to persons on, about, or adjacent to premises where Work is being performed and to provide a safe and healthful place of employment. In addition to meeting all requirements of OSHA, Cal-OSHA, state, and local codes, Contractor shall furnish, erect and properly maintain at all times, as directed by District or Architect or required by conditions and progress of work, all necessary safety devices, safeguards, construction canopies, signs, audible devices for protection of the blind, safety rails, belts and nets, barriers, lights, and watchmen for protection of workers and the public, and shall post danger signs warning against hazards created by such features in the course of construction. Contractor shall designate a responsible member of its organization on the Work, whose duty shall be to post information regarding protection and obligations of workers and other notices required under occupational safety and health laws, to comply with reporting and other occupational safety requirements, and to protect the life, safety and health of workers. The name and position of person so designated shall be reported to District by Contractor. Contractor shall correct any violations of safety laws, rules, orders, standards, or regulations. Upon the issuance of a citation or notice of violation by the Division of Occupational Safety and Health, such violation shall be corrected promptly.

The Contractor and Subcontractors shall continuously protect the Work, the District's property, and the property of others, from damage, injury, or loss arising in connection with operations under the Contract Documents. The Contractor and Subcontractors, at their own expense, shall make good any such

damage, injury, or loss, except such as may be solely due to, or caused by, agents or employees of the District.

10.1.2 Subcontractor Responsibility.

Contractor shall require that Subcontractors participate in, and enforce, the safety and loss prevention programs established by the Contractor for the Project, which will cover all Work performed by the Contractor and its Subcontractors. Each Subcontractor shall designate a responsible member of its organization whose duties shall include loss and accident prevention, and who shall have the responsibility and full authority to enforce the program. This person shall attend meetings with the representatives of the various Subcontractors employed to ensure that all employees understand and comply with the programs.

10.1.3 Cooperation.

All Subcontractors and material or equipment suppliers, shall cooperate fully with Contractor, the District, and all insurance carriers and loss prevention engineers.

10.1.4 Accident Reports.

Subcontractors shall immediately, within two (2) days, report in writing to the Contractor all accidents whatsoever arising out of, or in connection with, the performance of the Work, whether on or off the Site, which caused death, personal injury, or property damage, giving full details and statements of witnesses. In addition, if death or serious injuries or serious damages are caused, the accident shall be reported within four (4) days by telephone or messenger. Contractor shall thereafter immediately, within two (2) days, report the facts in writing to the District and the Architect giving full details of the accident.

10.1.5 First-Aid Supplies at Site.

The Contractor will provide and maintain at the Site first-aid supplies which complies with the current Occupational Safety and Health Regulations.

10.1.6 Material Safety Data Sheets and Compliance with Proposition 65.

(a) Contractor is required to have material safety data sheets available in a readily accessible place at the job site for any material requiring a material safety data sheet per the Federal "hazard communication" standard, or employees' "right-to-know law." The Contractor is also required to properly label any substance brought into the job site, and require that any person working with the material, or within the general area of the material, is informed of the hazards of the substance and follows proper handling and protection procedures.

Contractor is required to comply with the provisions of California Health and Safety Code section 25249, et seq., which requires the posting and giving of notice to persons who may be exposed to any chemical known to the State of California to cause cancer. The Contractor agrees to familiarize itself with the provisions of this section, and to comply fully with its requirements.

10.1.7 Non-Utilization of Asbestos Material.

NO ASBESTOS OR ASBESTOS-CONTAINING PRODUCTS SHALL BE **USED** IN THIS CONSTRUCTION OR IN ANY TOOLS, DEVICES, CLOTHING, OR EQUIPMENT USED TO EFFECT THIS CONSTRUCTION.

Asbestos and/or asbestos-containing products shall be defined as all items containing, but not limited to, chrysotile, amosite, anthophyllite, tremolite, and antinolite.

Any or all material containing greater than one-tenth of one percent (>.1%) asbestos shall be defined as asbestos-containing material.

All Work or materials found to contain asbestos or Work or material installed with asbestos-containing equipment will be immediately rejected and this Work will be removed at no additional cost to the District.

Decontamination and removal of Work found to contain asbestos or Work installed with asbestos-containing equipment shall be done only under supervision of a qualified consultant, knowledgeable in the field of asbestos abatement and accredited by the Environmental Protection Agency.

The asbestos removal contractor shall be an EPA accredited contractor qualified in the removal of asbestos and shall be chosen and approved by the asbestos consultant, who shall have sole discretion and final determination in this matter.

The asbestos consultant shall be chosen and approved by the District, who shall have sole discretion and final determination in this matter.

The Work will not be accepted until asbestos contamination is reduced to levels deemed acceptable by the asbestos consultant.

Interface of Work under this Contract with work containing asbestos shall be executed by the Contractor at his risk and at his discretion, with full knowledge of the currently accepted standards, hazards, risks, and liabilities associated with asbestos work and asbestos-containing products. By execution of this Contract, the Contractor acknowledges the above and agrees to hold harmless District and its assigns for all asbestos liability which may be associated with this work and agrees to instruct his employees with respect to the above-mentioned standards, hazards, risks, and liabilities.

10.2 SAFETY OF PERSONS AND PROPERTY

10.2.1 The Contractor.

The Contractor shall take reasonable precautions for the safety of, and shall provide reasonable protection to prevent damage, injury, or loss to:

- (a) Employees on the Work and other persons who may be affected thereby;
- (b) The Work, material, and equipment to be incorporated therein, whether in storage on or off the Site, under the care, custody, or control of the Contractor or the Contractor's Subcontractors or Sub-subcontractors; and

(c) Other property at the Site or adjacent thereto such as trees, shrubs, lawns, walks, pavement, roadways, structures, and utilities not designated for removal, relocation, or replacement in the course of construction.

Contractor is constructive owner of Project site as more fully discussed in Paragraph 6.2.

10.2.2 Contractor Notices.

The Contractor shall give notices and comply with applicable laws, ordinances, rules, regulations, and lawful orders of public authorities bearing on the safety of persons or property or their protection from damage, injury, or loss.

10.2.3 Safety Barriers and Safeguards.

The Contractor shall erect and maintain, as required by existing conditions and performance of the Contract, reasonable safeguards for safety and protection, including posting danger signs and other warnings against hazards, promulgating safety regulations, and notifying owners and users of adjacent sites and utilities.

10.2.4 Use or Storage of Hazardous Material.

When use or storage of explosives, other hazardous materials or equipment, or unusual methods are necessary for execution of the Work, the Contractor shall exercise utmost care and carry on such activities under supervision of properly qualified personnel. The Contractor shall notify the District any time that explosives or hazardous materials are expected to be stored on Site. Location of storage shall be coordinated with the District and local fire authorities.

10.2.5 Protection of Work.

The Contractor and Subcontractors shall continuously protect the Work, the District's property, and the property of others, from damage, injury, or loss arising in connection with operations under the Contract Documents. The Contractor and Subcontractors, at their own expense, shall make good any such damage, injury, or loss, except such as may be solely due to, or caused by, agents or employees of the District.

The Contractor, at Contractor's expense, will remove all mud, water, or other elements as may be required for the proper protection and prosecution of its Work.

Contractor shall take adequate precautions to protect existing roads, sidewalks, curbs, pavements, utilities, adjoining property and structures (including, without limitation, protection from settlement or loss of lateral support), and to avoid damage thereto, and repair any damage thereto caused by construction operations. All permits, licenses, or inspection fees required for such repair Work shall be obtained and paid for by Contractor.

10.2.6 Requirements for Existing Sites.

Contractor shall (unless waived by the District in writing):

- (a) When performing construction on existing sites, become informed and take into specific account the maturity of the students on the Site; and perform Work which may interfere with campus routine before or after campus hours, enclose working area with a substantial barricade, and arrange Work to cause a minimum amount of inconvenience and danger to students and faculty in their regular campus activities. The Contractor shall comply with specifications and directives of the District regarding the timing of certain construction activities in order to avoid unnecessary interference with the campus' functions.
- (b) Provide substantial barricades around any shrubs or trees indicated to be preserved.
- (c) Deliver materials to building area over route designated by Architect.
- (d) Take preventive measures to eliminate objectionable dust, noise, or other disturbances.
- (e) Confine apparatus, the storage of materials, and the operations of workers to limits indicated by law, ordinances, permits or directions of Architect; and not interfere with the Work or unreasonably encumber premises or overload any structure with materials; and enforce all instructions of District and Architect regarding signs, advertising, fires, and smoking and require that all workers comply with all regulations while on the Project site.
- (f) Take care to prevent disturbing or covering any survey markers, monuments, or other devices marking property boundaries or corners. If such markers are disturbed by accident, they shall be replaced by an approved land surveyor or civil engineer and all maps and records required therefrom shall be filed with county and local authorities, at no cost to the District. All filing and plan check fees shall be paid by Contractor.
- (g) Provide District on request with Contractor's written safety program and safety plan for each site.

10.2.7 Shoring and Structural Loading.

The Contractor shall not impose structural loading upon any part of the Work under construction or upon existing construction on or adjacent to the Site in excess of safe limits, or loading such as to result in damage to the structural, architectural, mechanical, electrical, or other components of the Work. The design of all temporary construction equipment and appliances used in construction of the Work and not a permanent part thereof, including, without limitation, hoisting equipment, cribbing, shoring, and temporary bracing of structural steel, is the sole responsibility of the Contractor. All such items shall conform with the requirements of governing codes and all laws, ordinances, rules, regulations, and orders of all authorities having jurisdiction. The Contractor shall take special precautions, such as shoring of masonry walls and temporary tie bracing of structural steel work, to prevent possible wind damage during construction of the Work. The installation of such bracing or shoring shall not damage the Work in place or the Work installed by others. Any damage which does occur shall be promptly repaired by the Contractor at no cost to the District.

10.2.8 Conformance Within Established Limits.

The Contractor and Subcontractors shall confine their construction equipment, the storage of materials, and the operations of workers to the limits indicated by laws, ordinances, permits, and the limits established by the District or the Contractor, and shall not unreasonably encumber the premises with construction equipment or materials.

10.2.9 Subcontractor Enforcement of Rules.

Subcontractors shall enforce the District's and the Contractor's instructions, laws, and regulations regarding signs, advertisements, fires, smoking, the presence of liquor, and the presence of firearms by any person at the Site.

10.2.10 Site Access.

The Contractor and the Subcontractors shall use only those ingress and egress routes designated by the District, observe the boundaries of the Site designated by the District, park only in those areas designated by the District, which areas may be on or off the Site, and comply with any parking control program established by the District, such as furnishing license plate information and placing identifying stickers on vehicles.

10.3 EMERGENCIES

10.3.1 Emergency Action.

In an emergency affecting the safety of persons or property, the Contractor shall take any action necessary, at the Contractor's discretion, to prevent threatened damage, injury, or loss. Additional compensation or extension of time claimed by the Contractor on account of an emergency shall be determined as provided in Article 7.

10.3.2 Accident Reports.

The Contractor shall promptly report in writing to the District all accidents arising out of or in connection with the Work, which caused death, personal injury, or property damage, giving full details and statements of any witnesses in conformance with Article 10.1.4. In addition, if death, serious personal injuries, or serious property damages are caused, the accident shall be reported in accordance with Paragraph 10.1.4, immediately by telephone or messenger to the District.

10.4 HAZARDOUS MATERIALS

10.4.1 Discovery of Hazardous Materials.

In the event the Contractor encounters or suspects the presence on the job site of material reasonably believed to be asbestos, polychlorinated biphenyl (PCB), or any other material defined as being hazardous by § 25249.5 of the California Health and Safety Code, which has not been rendered harmless, the Contractor shall immediately stop Work in the area affected and report the condition to the District and the Architect in writing, whether or not such material was generated by the Contractor or the District. The Work in the affected area shall not thereafter be resumed, except by written agreement of the District and the Contractor, if in fact the material is asbestos, polychlorinated biphenyl (PCB), or other hazardous

material, and has not been rendered harmless. The Work in the affected area shall be resumed only in the absence of asbestos, polychlorinated biphenyl (PCB), or other hazardous material, or when it has been rendered harmless by written agreement of the District and the Contractor.

If hazardous materials are encountered, they shall be handled in accordance with applicable local, state and federal regulation which may include: (1) CCR Title 8, Division 4, Chapter 4, Sections 5163 through 5167 and 5192 (Hazardous Waste Operations and Emergency Response); (2) CCR Title 22, Division 4.5, Chapters 10 through 13 and 18 (Environmental Health Standards for Management of Hazardous Waste); and (3) CCR Title 23, Division 3, Chapter 15 (Discharges of Hazardous Waste to Land).

Should the discovery of contaminants cause delay to Contractor's operation, extension of Contract Time will be granted by District in accordance with these General Conditions. Contractor may not be entitled to damages or additional payment due to such delays. District may, if it believes appropriate in its sole discretion, grant an extension of Contract Time.

The Contractor shall take all measures to avoid and/or mitigate delays due to Hazardous Materials/Waste finds such as; avoiding the area of the find and proceeding with other work on the project; developing "work around" plans; and documenting his best efforts to avoid and/or mitigate delays.

10.4.2 Hazardous Material Work Limitations.

In the event that the presence of hazardous materials is suspected or discovered on the Site (except in cases where asbestos and other hazardous material work in the Contractor's responsibility), the District shall retain an independent testing laboratory to determine the nature of the material encountered and whether corrective measures or remedial action is required. The Contractor shall not be required pursuant to Article 7 to perform without consent any Work in the affected area of the Site relating to asbestos, polychlorinated biphenyl (PCB), or other hazardous material, until any known or suspected hazardous material has been removed, or rendered harmless, or determined to be harmless by District, as certified by an independent testing laboratory and approved by the appropriate government agency.

10.4.3 Indemnification by Contractor for Hazardous Material Caused by Contractor.

In the event the hazardous materials on the Project Site is caused by the Contractor, the Contractor shall pay for all costs of testing and remediation, if any, and shall compensate the District for any additional costs incurred as a result of Contractor's generation of hazardous material on the Project Site. In addition, the Contractor shall defend, indemnify and hold harmless District and its agents, officers, and employees from and against any and all claims, damages, losses, costs and expenses incurred in connection with, arising out of, or relating to, the presence of hazardous material on the Project Site.

10.4.4 Terms of Hazardous Material Provision.

The terms of this Hazardous Material provision shall survive the completion of the Work and/or any termination of this Contract.

ARTICLE 11

INSURANCE AND BONDS

11.1 Not used

11.2 Not used

11.3 Not used

11.4 Not used

11.5 OTHER INSURANCE

The Contractor shall provide all other insurance required to be maintained under applicable laws, ordinances, rules, and regulations.

11.6 PROOF OF INSURANCE

The Contractor shall not commence Work nor shall it allow any Subcontractor to commence Work under this Contract until all required insurance and certificates have been obtained and delivered in duplicate to the District for approval subject to the following requirements:

(a) Certificates and insurance policies shall include the following clause:

“This policy shall not be non-renewed, canceled, or reduced in required limits of liability or amounts of insurance until notice has been mailed to the District. Date of cancellation or reduction may not be less than thirty (30) days after the date of mailing notice.”

(b) Certificates of insurance shall state in particular those insured, the extent of insurance, location and operation to which the insurance applies, the expiration date, and cancellation and reduction notices.

(c) Certificates of insurance shall clearly state that the District and the Architect are named as additional insureds under the policy described and that such insurance policy shall be primary to any insurance or self-insurance maintained by District.

(d) The Contractor and its Subcontractors shall produce a certified copy of any insurance policy required under this Section upon written request of the District.

11.7 COMPLIANCE

In the event of the failure of any contractor to furnish and maintain any insurance required by this Article 11, or in Section 00600, Construction Agreement, the Contractor shall be in default under the Contract. Compliance by Contractor with the requirement to carry insurance and furnish certificates or policies evidencing the same shall not relieve the Contractor from liability assumed under any provision of the Contract Documents, including, without limitation, the obligation to defend and indemnify the District and the Architect.

11.8 WAIVER OF SUBROGATION

Contractor waives (to the extent permitted by law) any right to recover against the District for damages to the Work, any part thereof, or any and all claims arising by reason of any of the foregoing, but only to the extent that such damages and/or claims are covered by property insurance and only to the extent of such coverage (which shall exclude deductible amounts) by insurance actually carried by the District.

The provisions of this section are intended to restrict each party to recovery against insurance carriers only to the extent of such coverage and waive fully and for the benefit of each, any rights and/or claims which might give rise to a right of subrogation in any insurance carrier. The District and the Contractor shall each obtain in all policies of insurance carried by either of them, a waiver by the insurance companies thereunder of all rights of recovery by way of subrogation for any damages or claims covered by the insurance.

ARTICLE 12

UNCOVERING AND CORRECTION OF WORK

12.1 UNCOVERING OF WORK

12.1.1 Uncovering Work for Required Inspections.

If a portion of the Work is covered without Inspector or Architect approval or not in compliance with the Contract Documents, it must, if required in writing by the Inspector or the Architect, be uncovered for the Inspector's or the Architect's observation and be replaced at the Contractor's expense without change in the Contract Sum or Time.

12.1.2 Costs for Inspections not Required.

If a portion of the Work has been covered which the Inspector or the Architect has not specifically requested to observe prior to its being covered, the Inspector or the Architect may request to see such Work, and it shall be uncovered by the Contractor. If such Work is in accordance with the Contract Documents, costs of uncover and replacement shall, by appropriate Change Order, be charged to the District. If such Work is not in accordance with Contract Documents, the Contractor shall pay such costs unless the condition was caused by the District or a separate contractor, in which event the District shall be responsible for payment of such costs to the Contractor.

12.2 CORRECTION OF WORK

12.2.1 Correction of Rejected Work.

The Contractor shall promptly correct the Work rejected by the Inspector or the District upon recommendation of the Architect as failing to conform to the requirements of the Contract Documents, whether observed before or after Completion and whether or not fabricated, installed, or completed. The Contractor shall bear costs of correcting the rejected Work, including additional testing, inspections, and compensation for the Inspector's or the Architect's services and expenses made necessary thereby.

12.2.2 One-Year Warranty or Guaranty Corrections.

If, within one (1) years after the date of Completion of the Work or a designated portion thereof, or after the date for commencement of warranties and guaranties established under this Contract, or by the terms of an applicable special warranty or guaranty required by the Contract Documents, any of the Work is found to be not in accordance with the requirements of the Contract Documents, the Contractor shall correct it promptly after receipt of written notice from the District to do so unless the District has previously given the Contractor a written acceptance of such condition. This period of one (1) years shall be extended with respect to portions of the Work first performed after Completion by the period of time between Completion and the actual performance of the Work. This obligation under this Paragraph 12.2.2 shall survive acceptance of the Work under the Contract and termination of the Contract. The District shall give such notice promptly after discovery of the condition.

12.2.3 District's Rights if Contractor Fails to Correct.

If the Contractor fails to correct nonconforming Work within a reasonable time, the District may correct it, pursuant to Article 9.

ARTICLE 13

MISCELLANEOUS PROVISIONS

13.1 GOVERNING LAW AND REGULATIONS

The Contract shall be governed by the law of the place where the Project is located.

13.1.1 Specific reference in the Specifications to codes and regulations or requirements of regulatory agencies shall mean the latest printed edition of each adopted by the regulatory agency in effect at the time of the opening of Proposals, except as may be otherwise specifically stated in the Contract Documents.

13.1.2 No change order shall be considered for any change in any applicable federal, state or local code or regulation if similar language existed in an alternate applicable regulation in force at the time of opening of Bids.

13.1.3 Contractor shall not allow design or construction of any conditions wherein the finished Work will not comply with current applicable codes. No change order shall be considered by District for the Work correction of any Work not complying with code.

13.1.4 This section shall cover the general requirements for regulatory requirements pertaining to the Work and is supplementary to all other regulatory requirements mentioned or referenced elsewhere in the Contract Documents.

13.1.5 Code, laws, ordinances, rules and regulations referred to shall have full force and effect as though printed in full in these Specifications. Code, laws, ordinances, rules and regulations are not furnished to Contractor because Contractor is assumed to be and shall be familiar with these requirements, including readily available access to these requirements. The listing of applicable codes, laws, and regulations for hazardous waste

abatement Work in the Contract Documents is supplied to Contractor as a courtesy and shall not limit Contractor's responsibility for complying with all applicable laws, regulations or ordinances having application to the Work. Where conflict among the requirements or with these Specifications occurs, the most stringent requirements shall be used with no change in Contract Sum or Contract Time.

13.1.6 Contractor shall conform to all applicable federal, state, and local codes, laws, ordinances, rules and regulations, whether or not referenced in the Contract Documents.

13.1.7 Precedence:

13.1.7.1 Where specified requirements differ from the requirements of applicable codes, ordinances and standards, the more stringent requirements shall take precedence.

13.1.7.2 Where Contract Documents require or describe products or execution of better quality, higher standard or greater size than required by applicable codes, ordinances and standards, Contract Documents shall take precedence so long as such increase is legal.

13.1.7.3 Where no requirements are identified on Contract Documents, comply with all requirements of applicable codes, ordinances and standards of governing authorities have jurisdiction.

13.1.7.4 If compliance with two or more standards is specified and the standards establish different or conflicting requirements for minimum quantities or quality levels, comply with the most stringent requirement. Refer uncertainties and requirements that are different, but apparently equal, to District for a decision before proceeding.

13.2 SUCCESSORS AND ASSIGNS

The District and the Contractor respectively bind themselves, their partners, successors, assigns, and legal representatives to the other party hereto and to partners, successors, assigns, and legal representatives of such other party in respect to covenants, agreements, and obligations contained in the Contract Documents. Neither party to the Contract shall assign the Contract as a whole without written consent of the other. If either party attempts to make such an assignment without such consent, that party shall nevertheless remain legally responsible for all obligations under the Contract.

13.3 WRITTEN NOTICE

In the absence of specific notice requirements in the Contract Documents, written notice shall be deemed to have been duly served if delivered in person to the individual, member of the firm or entity, or to an officer of the corporation for which it was intended, or if delivered at or sent by registered or certified mail to the last business address known to the party giving notice.

13.4 RIGHTS AND REMEDIES

13.4.1 Duties and Obligations Cumulative.

Duties and obligations imposed by the Contract Documents and rights and remedies available thereunder shall be in addition to and not a limitation of duties, obligations, rights, and remedies otherwise imposed or available by law.

13.4.2 No Waiver.

No action or failure to act by the Inspector, the District, or the Architect shall constitute a waiver of a right or duty afforded them under the Contract Documents, nor shall such action or failure to act constitute approval of or acquiescence in a breach thereunder, except as may be specifically agreed in writing.

13.5 TESTS AND INSPECTIONS

13.5.1 Compliance.

Tests, inspections, and approvals of portions of the Work required by the Contract Documents will comply with Title 24, and with all other laws, ordinances, rules, regulations, or orders of public authorities having jurisdiction.

13.5.2 Independent Testing Laboratory.

The District will select and pay an independent testing laboratory to conduct all tests and inspections required by regulatory agencies. Selection of the materials required to be tested shall be made by the laboratory, and not by the Contractor. All costs for all other tests shall be included in the Bid Price and shall be paid for by the Contractor. ***The Contractor will be responsible to reimburse the District for the cost differential (e.g., travel expenses, subsistence expenses, higher hourly rates, premium time for overtime hours, swing shifts or any time outside of normal work day hours), if any, for inspection and testing services required by regulatory agencies incurred outside of a fifty (50) mile radius from the Project Site, or if the Contractor requests inspection and testing services outside normal work day hours (eight hours/day) Monday through Friday, which are typically between 7:00 am and 3:30 pm. The District will provide the Contractor with the invoice and deduct the cost differential from the next Progress Payment. The District shall also pay for geotechnical compaction testing services by the Geotechnical Engineer of Record.***

13.5.3 Contractor Responsibilities

13.5.3.1 Make samples available to the Independent Testing Laboratory. Samples shall be selected by laboratory personnel. Allow proper time for selecting samples, and making tests or considerations.

13.5.3.2 Cooperate with laboratory personnel, and provide access to work and to manufacturer's facilities.

13.5.3.3 Provide incidental labor and facilities to provide access to work to be tested, to obtain and handle samples as selected by laboratory personnel at the site

or at source of products to be tested, to facilitate tests and inspections, and for storage and curing of test samples.

13.5.3.4 Schedule all tests and inspections with the testing and inspections firm and to notify Construction Manager and Project Inspector a minimum of 3 working days prior to expected time for operations requiring inspection and testing services. Do not allow work to be covered prior to inspection and testing.

13.5.3.5 Cooperate fully with the testing laboratory's personnel and with special inspectors in inspection any part of the construction and in taking any samples of materials required to be tested. Provide access to the work. The Contractor's personnel shall furnish and cut or prepare all samples in the presence of either the testing laboratory personnel or the special inspectors and secure the witness's initial on each sample prepared.

13.5.3.6 Notify the testing laboratory to pick up the initialed samples the same day the samples were prepared. Alert the testing laboratory 3 working days in advance as to the times and location of the required sampling, tests and inspections so as to not delay the work of the project, and make sure that the required sampling, tests inspections are promptly completed.

13.5.4 Contractor Paid Test/Inspection Reports not required by regulatory agencies:

13.5.4.1 Reports will comply with Section 4-335(d), Part 1, Title 24, CCR.

13.5.4.2 Include every test and inspection made regardless of whether such tests and inspections indicate that the material and procedures are satisfactory or unsatisfactory.

13.5.4.3 Include records of special sampling operations as required.

13.5.4.4 Indicate that materials were sampled and tested in accordance with requirements of CCR regulations and Construction Documents.

13.5.4.5 Indicate specified design strength of materials such as masonry, concrete and steel.

13.5.4.6 State whether or not materials and procedures comply with requirements of the Construction Documents.

13.5.4.7 Submit copies of reports to District, Architect, Project Inspector, Structural Engineer, Civil Engineer, Soils Engineer and Contractor within 14 days of tests. Submit copies of reports of non-complying materials and procedures immediately.

13.5.5 Advance Notice to Inspector.

The Contractor shall notify the Inspector a sufficient time in advance of its readiness for required observation or inspection so that the Inspector may arrange for same, but no less than 2 work days. The Contractor shall notify the Inspector a sufficient time in advance, but no less than 2 work days, of the manufacture of material to be supplied under the Contract Documents which must, by terms of the Contract Documents, be tested in order that the Inspector may arrange for the testing of the material at the source of supply.

13.5.6 Testing Off-Site.

Any material shipped by the Contractor from the source of supply, prior to having satisfactorily passed such testing and inspection or prior to the receipt of notice from said Inspector that such testing and inspection will not be required, shall not be incorporated in the Work.

13.5.7 Additional Testing or Inspection.

If the Inspector, the Architect, the District, or public authority having jurisdiction determines that portions of the Work require additional testing, inspection, or approval not included under Paragraph 13.5.1, the Inspector will, upon written authorization from the District, make arrangements for such additional testing, inspection, or approval. The District shall bear such costs except as provided in Paragraph 13.5.4.

13.5.8 Costs for Retesting.

If such procedures for testing, inspection, or approval under Paragraphs 13.5.1 and 13.5.2 reveal failure of the portions of the Work to comply with requirements established by the Contract Documents, the Contractor shall bear all costs arising from such failure, including those of re-testing, re-inspection, or re-approval, including, but not limited to, compensation for the Architect's services and expenses. Any such costs shall be paid by the District, invoiced to the Contractor, and deducted from the next Progress Payment.

13.5.9 Retesting Covered Work.

Re-examination of previously tested and inspected work may be ordered by the District, Architect, or by the Project Inspector. The Contractor shall uncover such work if retesting is ordered. If work is found in accordance with Contract Documents, the District will pay costs of uncovering, removing, retesting and replacing. If work is found not in accordance with Contract Documents, the District will deduct the cost of retesting from the Contract Sum by Change Order and the Contractor will bear the costs of uncovering, removing and replacing work.

13.5.10 Costs for Premature Test.

In the event the Contractor requests any test or inspection for the Project and is not completely ready for the inspection, the Contractor shall be invoiced by the District for all costs and expenses resulting from that testing or inspection, including, but not limited to, the Inspector's and Architect's fees and expenses, and the amount of the invoice of shall be deducted from the next Progress Payment.

13.6 TRENCH EXCAVATION

13.6.1 Trenches Greater Than Five Feet.

Pursuant to Labor Code § 6705, if the Contract Price exceeds \$25,000 and involves the excavation of any trench or trenches five (5) feet or more in depth, the Contractor shall, in advance of excavation, submit to the District or a registered civil or structural engineer employed by the District or Architect, a detailed plan showing the design of shoring for protection from the hazard of caving ground during the excavation of such trench or trenches. Said detailed plan shall be prepared by a California licensed civil or structural engineer employed by the Contractor.

13.6.2 Excavation Safety.

If such plan varies from the Shoring System Standards established by the Construction Safety Orders, the plan shall be prepared by a registered civil or structural engineer, but in no case shall such plan be less effective than that required by the Construction Safety Orders. No excavation of such trench or trenches shall be commenced until said plan has been accepted in writing by the District or by the person to whom authority to accept has been delegated by the District.

13.6.3 No Tort Liability of District.

Pursuant to Labor Code § 6705, nothing in this Article shall impose tort liability upon the District or any of its employees.

13.6.4 No Excavation Without Permits.

The Contractor shall not commence any excavation Work until it has secured all necessary permits including the required CAL OSHA excavation/shoring permit. Any permits shall be prominently displayed on the Site prior to the commencement of any excavation.

13.7 WAGE RATES, TRAVEL, AND SUBSISTENCE

13.7.1 Wage Rates.

Pursuant to the provisions of Article 2 (commencing at § 1720), Chapter 1, Part 7, Division 2, of the Labor Code, the District has obtained the general prevailing rate of per diem wages and the general prevailing rate for holiday and overtime work in the locality in which this public works project is to be performed for each craft, classification, or type of worker needed for this Project from the Director of the Department of Industrial Relations (“Director”). These rates are on file at the administrative office of the DISTRICT and are also available from the Director of the Department of Industrial Relations. Copies will be made available to any interested party on request. The Contractor shall post a copy of such wage rates at appropriate, conspicuous, weatherproof points at the Site.

Any worker employed to perform work on the Project, but such work is not covered by any classification listed in the published general prevailing wage rate determinations or per diem wages determined by the Director of the Department of Industrial Relations, shall be paid not less than the minimum rate of wages specified therein for the classification which most nearly corresponds to the employment of such person in such classification.

13.7.2 Holiday and Overtime Pay.

Holiday and overtime work, when permitted by law, shall be paid for at the rate set forth in the prevailing wage rate determinations issued by the Director of the Department of Industrial Relations or at least one and one-half (1½) times the specified basic rate of per diem wages, plus employer payments, unless otherwise specified in the contract documents or authorized by law.

13.7.3 Wage Rates Not Affected by Subcontracts.

The Contractor shall pay and shall cause to be paid each worker engaged in the execution of the Work on the Project not less than the general prevailing rate of per diem wages determined by the

Director, regardless of any contractual relationship which may be alleged to exist between the Contractor or any Subcontractor and such workers.

13.7.4 Per Diem Wages.

The Contractor shall pay and shall cause to be paid to each worker needed to execute the Work on the Project per diem wages including, but not limited to, employer payments for health and welfare, pensions, vacation, travel time and subsistence pay as provided for in Labor Code §1773.1.

13.7.5 Forfeiture and Payments.

Pursuant to Labor Code §1775 and the District's Labor Compliance Program, the Contractor shall forfeit to the District, not more than Fifty Dollars (\$50.00) for each calendar day, or portion thereof, for each worker paid less than the prevailing wages rates as determined by the Director of the Department of Industrial Relations, for the work or craft in which the worker is employed for any Work done under the Agreement by the Contractor or by any Subcontractor under it. The amount of the penalty shall be determined by the Labor Commissioner and shall be based on consideration of: (1) whether the Contractor or Subcontractor's failure to pay the correct rate of per diem wages was a good faith mistake and, if so, the error was promptly and voluntarily correct upon being brought to the attention of the Contractor or Subcontractor; and (2) whether the Contractor or Subcontractor has a prior record of failing to meet its prevailing wage obligations. Further details regarding the enforcement of paying prevailing wage rates, reporting violations, withholding contract payments, forfeitures and hearing to review withholding of contract payments are set forth in the District's Labor Compliance Program.

13.8 RECORDS OF WAGES PAID

13.8.1 Payroll Records.

(a) Pursuant to §1776 of the Labor Code, each Contractor and Subcontractor shall keep an accurate payroll record showing the name, address, social security number, work classification and straight time and overtime hours worked each day and week, and the actual per diem wages paid to each journeyman, apprentice, worker or other employee employed in connection with the Project.

(b) All payroll records shall be certified and submitted to the District with each application for payment, but shall not be submitted less than once per month. All payroll records shall be available for inspection at all reasonable hours at the principal office of the Contractor on the following basis:

- (1) A certified copy of an employee's payroll record shall be made available for inspection or furnished to the employee or their authorized representative on request.
- (2) A certified copy of all payroll records shall be made available for inspection or furnished upon request to a representative of District, the Division of Labor Standards Enforcement or the Division of Apprenticeship Standards of the Department of Industrial Relations.

(3) A certified copy of all payroll records shall be made available upon request by the public for inspection or for copies thereof. However, a request by the public shall be made through the District, the Division of Apprenticeship Standards or the Division of Labor Standards Enforcement. If the requested payroll records have not been provided pursuant to Paragraph (2) above, the requesting party shall, prior to being provided the records, reimburse the costs, according to law for the preparation by the Contractor, Subcontractor(s), and the entity through which the request was made. The public shall not be given access to such records at the principal office of the Contractor.

(c) The certified payroll records shall be on forms provided by the Division of Labor Standards Enforcement or shall contain the same information as the forms provided by the Division of Labor Standards Enforcement.

(d) The Contractor or Subcontractor(s) shall file a certified copy of all payroll records with the entity that requested such records within 10 calendar days after receipt of a written request.

(e) Any copy of records made available for inspection as copies and furnished upon request to the public or any public agency by the District, the Division of Apprenticeship Standards or the Division of Labor Standards Enforcement shall be marked or obliterated to prevent disclosure of an individual's name, address and social security number. The name and address of the Contractor awarded the Contract or the Subcontractor(s) performing the Contract shall not be marked or obliterated. Any copy of records made available for inspection by, or furnished to, a joint labor-management committee established pursuant to the federal Labor Management Cooperation Act of 1978 (Section 175a of Title 29 of the United States Code) shall be marked or obliterated only to prevent disclosure of an individual's name and social security number.

(f) The Contractor shall inform the District of the location of all payroll records, including the street address, city and county, and shall, within five working days, provide a notice of a change of location and address.

(g) The Contractor or Subcontractor(s) shall have 10 calendar days in which to comply subsequent to receipt of a written notice requesting payroll records. In the event that the Contractor or Subcontractor(s) fails to comply within the 10-day period, the Contractor or Subcontractor(s) shall, as a penalty to the District, forfeit Twenty-Five Dollars (\$25.00) for each calendar day, or portion thereof, for each worker, until strict compliance is effectuated. Upon the request of the Division of Apprenticeship Standards or the Division of Labor Standards Enforcement, these penalties shall be withheld from progress payments then due.

Responsibility for compliance with this Article and the District's Labor Compliance Program shall rest upon the Contractor.

13.8.2 Withholding of Contract Payments & Penalties.

The District may withhold or delay contract payments to the Contractor and/or any Subcontractor if:

- (a) The required prevailing rate of per diem wages determined by the Director of the Department of Industrial Relations is not paid to all workers employed on the Project; or
- (b) The Contractor or Subcontractor(s) fail to submit all required certified payroll records with each application for payment, but not less than once per month; or
- (c) The Contractor or Subcontractor(s) submit incomplete or inadequate payroll records; or
- (d) The Contractor or Subcontractor(s) fail to comply with the Labor Code requirements concerning apprentices; or
- (e) The Contractor or Subcontractor(s) fail to comply with the District's Labor Compliance Program; or
- (f) The Contractor or Subcontractor(s) fail to comply with any applicable state laws governing labor on public works projects.

Any withholding of contract payments and penalties are set forth in the District's Labor Compliance Program.

13.9 APPRENTICES

13.9.1 Apprentice Wages and Definitions.

All apprentices employed by the Contractor to perform services under the Contract shall be paid the standard wage paid to apprentices under the regulations of the craft or trade for which he or she is employed, and as determined by the Director of the Department of Industrial Relations, and shall be employed only at the Work of the craft or trade to which he or she is registered. Only apprentices, as defined in §3077 of the Labor Code, who are in training under apprenticeship standards that have been approved by the Chief of the Division of Apprenticeship Standards and who are parties to written apprenticeship agreements under Chapter 4 (commencing with §3070) of Division 3, are eligible to be employed under this Contract. The employment and training of each apprentice shall be in accordance with the apprenticeship standards and apprentice agreements under which he or she is training, or in accordance with the rules and regulations of the California Apprenticeship Council.

13.9.2 Employment of Apprentices.

Contractor agrees to comply with the requirements of Labor Code §1777.5. The Contractor awarded the Project, or any Subcontractor under him or her, when performing any of the Work under the Contract or subcontract, employs workers in any apprenticeable craft or trade, the Contractor and Subcontractor shall employ apprentices in the ratio set forth in Labor Code §1777.5. The Contractor or any Subcontractor must apply to any apprenticeship program in the craft or trade that can provide apprentices to the Project site for a certificate approving the Contractor or Subcontractor under the apprenticeship standards for the employment and training of apprentices in the area or industry affected. However, the decision of the apprenticeship program to approve or deny a certificate shall be subject to review by the Administrator of Apprenticeship. The apprenticeship program or programs, upon approving the Contractor or Subcontractor, shall arrange for the dispatch of apprentices to the Contractor or Subcontractor. The Contractor or Subcontractor covered by an apprenticeship program's standards shall not be required to submit any additional application in order to include additional public works contracts

under that program. "Apprenticeable craft or trade" as used in this Article means a craft or trade determined as an apprenticeable occupation in accordance with the rules and regulations prescribed by the California Apprenticeship Council. The ratio of work performed by apprentices to journeyman employed in a particular craft or trade on the Project shall be in accordance with Labor Code §1777.5.

13.9.3 Submission of Contract Information.

Prior to commencing work on the Project, the Contractor and Subcontractors shall submit contract award information to the applicable apprenticeship program(s) that can supply apprentices to the Project and make the request for the dispatch of apprentices in accordance with the Labor Code. The information submitted shall include an estimate of journeyman hours to be performed under the Contract, the number of apprentices proposed to be employed, and the approximate dates the apprentices would be employed. A copy of this information shall also be submitted to the District. Within 60 days after concluding work on the Project, the Contractor and Subcontractors shall submit to the District, if requested, and to the apprenticeship program a verified statement of the journeyman and apprentice hours performed on the Project.

13.9.4 Apprentice Fund.

The Contractor or any Subcontractor under him or her, who, in performing any of the Work under the Contract, employs journeymen or apprentices in any apprenticeable craft or trade shall contribute to the California Apprenticeship Council the same amount that the Director determines is the prevailing amount of apprenticeship training contributions in the area of the Project. The Contractor and Subcontractors may take as a credit for payments to the California Apprenticeship Council any amounts paid by the Contractor or Subcontractor to an approved apprenticeship program that can supply apprentices to the Project. The Contractor and Subcontractors may add the amount of the contributions in computing his or her bid for the Contract.

13.9.5 Prime Contractor Compliance.

The responsibility of compliance with Article 13 and §1777.5 of the Labor Code for all apprenticeable occupations is with the Prime Contractor. Any Contractor or Subcontractor that knowingly violates the provisions of this Article or Labor Code §1777.5 shall be subject to the penalties set forth in Labor Code §1777.7 and the District's Labor Compliance Program.

13.10 ASSIGNMENT OF ANTITRUST CLAIMS

13.10.1 Application.

Pursuant to Government Code § 4551, in entering into a public works contract or a subcontract to supply goods, services, or materials pursuant to a public works contract, the Contractor or Subcontractor offers and agrees to assign to the District all rights, title, and interest in and to all causes of action it may have under Section 4 of the Clayton Act, (15 U.S.C. § 15) or under the Cartwright Act (Chapter 2 [commencing with § 16700] of Part 2 of Division 7 of the Business and Professions Code), arising from the purchase of goods, services, or materials pursuant to the public works contract or the subcontract. This assignment shall be made and become effective at the time the awarding body tenders final payment to the Contractor, without further acknowledgment by the parties. If the District receives, either through judgment or settlement, a monetary recovery for a cause of action assigned under Chapter 11

(commencing with § 4550) of Division 5 of Title 1 of the Government Code, the assignor shall be entitled to receive reimbursement for actual legal costs incurred and may, upon demand, recover from the District any portion of the recovery, including treble damages, attributable to overcharges that were paid by the assignor but were not paid by the District as part of the bid price, less the expenses incurred in obtaining that portion of the recovery.

13.10.2 Assignment of Claim.

Upon demand in writing by the assignor, the District shall, within one (1) year from such demand, reassign the cause of action assigned pursuant to this Article if the assignor has been or may have been injured by the violation of law for which the cause of action arose and the District has not been injured thereby or the District declines to file a court action for the cause of action.

13.11 STATE AUDIT

Pursuant to and in accordance with the provisions of Government Code § 10532, or any amendments thereto, all books, records, and files of the District, the Contractor, or any Subcontractor connected with the performance of this Contract involving the expenditure of state funds in excess of Ten Thousand Dollars (\$10,000.00), including, but not limited to, the administration thereof, shall be subject to the examination and audit of the Office of the Auditor General of the State of California for a period of three (3) years after final payment is made under this Contract. Contractor shall preserve and cause to be preserved such books, records, and files for the audit period.

13.12 Not Used

13.13 INDUSTRY STANDARDS

13.13.1 Applicability of Standards.

Unless the Contract Documents specify more stringent requirements, applicable construction industry standards have the same force and effect as if bound or copied directly into the Contract Documents to the extent referenced. Such standards are made a part of the Contract Documents by reference.

13.13.2 Publication Dates.

Comply with standards in effect as of date of the Contract Documents, unless otherwise indicated.

13.13.3 Minimum Quantity or Quality Levels.

The quantity or quality level shown or specified shall be the minimum provided or performed. The actual installation may comply exactly with the minimum quantity or quality specified, or it may exceed the minimum within reasonable limits. To comply with these requirements, indicated numeric values are minimum or maximum, as appropriate, for the context of requirements. Refer uncertainties to Architect for a decision before proceeding.

13.13.4 Copies of Standards.

Each entity engaged in construction on Project must be familiar with industry standards applicable to its construction activity. Copies of applicable standards are not contained within the

Contract Documents. Where copies of standards are needed to perform a required construction activity, obtain copies directly from publication source and make them available on request.

13.13.5 Abbreviations and Acronyms for Industry Organizations.

Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the entities indicated in Gale Research's "Encyclopedia of Associations" or in Columbia Books' "National Trade & Professional Associations of the U.S."

13.14 PRODUCTS

13.14.1 All products are to be new and not previously incorporated into or used in any other project or facility. Products salvaged or recycled from other projects are not considered new products and are not permitted.

13.14.2 The term product, as used in the Contract Documents, includes materials, equipment, systems, and like terms of similar intent.

13.14.3 Products include materials, machinery, components, equipment, fixtures and systems forming the Work and purchased for incorporation into the Work.

13.14.4 Do not reuse materials and/or equipment removed from existing premises except as specifically permitted by the Contract Documents.

13.14.5 Provide interchangeable components of the same manufacturer, for similar components.

13.14.6 Named products are items identified in the Contract Documents by manufacturer's product name, including make or model number or other designation shown or listed in manufacturer's published product literature that is current as of date of the Contract Documents.

13.14.7 TRANSPORTATION AND HANDLING

13.14.7.1 Transport and handle products in accordance with manufacturer's instructions.

13.14.7.2 Promptly inspect shipments to assure that products comply with requirements, quantities are correct, and products are undamaged.

13.14.8 SHIPPING REQUIREMENTS

13.14.8.1 Preparation for Shipment: All equipment shall be suitably packaged to facilitate handling and to protect against damage during transit and storage. All equipment shall be protected from exposure to the elements and shall be kept dry at all times.

13.14.8.2 Painted and coated surfaces shall be protected against impact, abrasion, discoloration, and other damage. Painted and coated surfaces which are damaged prior to acceptance of equipment shall be repainted to the satisfaction of District at the expense of Contractor.

13.14.9 PRODUCT DELIVERY, STORAGE, AND HANDLING

13.14.9.1 Store products only in staging area per provisions of the Contract Documents.

13.14.9.2 Handle, store, and protect products in accordance with manufacturer's instructions, with seals and labels intact and legible. Store sensitive products in weather-tight, climate-controlled enclosures.

13.14.9.3 For exterior storage of fabricated products, place on appropriate supports, above ground.

13.14.9.4 Cover products subject to deterioration with impervious sheet covering. Provide ventilation to avoid condensation.

13.14.9.5 Deliver, store and handle products using means and methods that will prevent damage, deterioration, and loss, including theft. Comply with manufacturer's written instructions.

13.14.9.6 Contractor shall comply with the following without limitation:

- (a) Contractor shall bear the responsibility for delivery of equipment, spare parts, special tools, and materials to the Site and shall comply with the requirements specified herein and provide required information concerning the shipment and delivery of the materials specified in the Contract Documents.
- (b) Electrical equipment and all equipment with antifriction or sleeve bearings shall be stored in weather-tight structures maintained at a temperature above 60 degree Fahrenheit. Electrical equipment controls and insulation shall be protected against moisture and water damage. All space heaters furnished in or with equipment shall be connected and operated continuously or according to manufacturer's requirements.
- (c) Equipment and materials shall not have any pitting, rust, decay, or other deleterious effects of storage when installed in the Work.
- (d) Store products to allow for inspection, measurement, and/or counting of units.
- (e) Store materials in a manner that will not endanger adjacent Work.
- (f) Store products that are subject to damage by the elements, under cover in a weather-tight enclosure above ground, with ventilation adequate to prevent condensation.
- (g) Store cementitious products and materials on elevated platforms.
- (h) Comply with product manufacturer's written instructions for temperature, humidity, ventilation, and weather-protection requirements for storage.

ARTICLE 14

TERMINATION OR SUSPENSION OF THE CONTRACT

14.1 TERMINATION BY THE CONTRACTOR FOR CAUSE

14.1.1 Grounds for Termination.

The Contractor may terminate the Contract if the Work is stopped for a period of thirty (30) consecutive days through no act or fault of the Contractor, a Subcontractor, a Sub-subcontractor, their agents or employees, or any other persons performing portions of the Work for whom the Contractor is contractually responsible, for only the following reasons:

- (a) Issuance of an order of a court or other public authority having jurisdiction; or
- (b) An act of government, such as a declaration of national emergency.

14.1.2 Notice of Termination.

If one of the above reasons exists, the Contractor may, upon written notice of seven (7) additional days to the District, terminate the Contract and recover from the District payment for Work executed and for reasonable costs verified by the Architect with respect to materials, equipment, tools, construction equipment, and machinery, including reasonable overhead, profit, and damages.

14.2 TERMINATION BY THE DISTRICT FOR CAUSE

14.2.1 Grounds for Termination.

The District may terminate the Contractor and/or this Contract for the following reasons:

- (a) Persistently or repeatedly refuses or fails to supply enough properly skilled workers or proper materials;
- (b) Persistently or repeatedly is absent, without excuse, from the job site;
- (c) Fails to make payment to Subcontractors, suppliers, materialmen, etc.;
- (d) Persistently disregards laws, ordinances, rules, regulations, or orders of a public authority having jurisdiction; or
- (e) Becomes bankrupt or insolvent, including the filing of a general assignment for the benefit of creditors; or
- (e) Otherwise is in substantial breach of a provision of the Contract Documents.

14.2.2 Notification of Termination.

When any of the above reasons exist, the District may, without prejudice to any other rights or remedies of the District and after giving the Contractor and the Contractor's surety, if any, written notice of seven (7) days, except in the event of an emergency or critical path delay to the schedule in which case the District may give written notice of forty-eight (48) hours, terminate the Contract and may, subject to any prior rights of the surety:

- (a) Take possession of the Project and of all material, equipment, tools, and construction equipment and machinery thereon owned by the Contractor;
- (b) Accept assignment of Subcontracts. Contractor acknowledges and agrees that if the District (in its sole and absolute discretion) decides to takeover completion of the Project, the Contractor agrees to immediately assign all subcontracts to the District which the District has chosen to accept; and
- (c) Complete the Work by any reasonable method the District may deem expedient, including contracting with a replacement contractor or contractors.

14.2.3 Payments Withheld.

If the District terminates the Contract for one of the reasons stated in Paragraph 14.2.1, the Contractor shall not be entitled to receive further payment until the Work is complete. All costs associated with the termination and completion of the Project shall be the responsibility of the Contractor and/or its surety.

14.2.4 Payments Upon Completion.

If the unpaid balance of the Contract Sum exceeds costs of completing the Work, including compensation for professional services and expenses made necessary thereby, such excess shall be paid to the Contractor. If such costs exceed the unpaid balance, the Contractor shall pay the difference to the District. The amount to be paid to the Contractor, or District, as the case may be, shall be certified by the Architect upon application. This payment obligation shall survive completion of the Contract.

14.3 TERMINATION OF CONTRACT BY DISTRICT (CONTRACTOR NOT AT FAULT)

14.3.1 Termination for Convenience.

District may terminate the Contract upon fifteen (15) calendar days of written notice to the Contractor and use any reasonable method the District deems expedient to complete the project, including contracting with replacement contractor or contractors, if it is found that reasons beyond the control of either the District or Contractor make it impossible or against the District's interest to complete the work. In such a case, the Contractor shall have no claims against the District except: (1) the actual cost for labor, materials, and services performed which may be documented through timesheets, invoices, receipts, or otherwise, and (2) ten percent (10%) profit and overhead, and (3) five percent (5%) termination cost of the total of items (1) and (2). Contractor acknowledges and agrees that if the District (in its sole and absolute discretion) decides to takeover completion of the Project, the Contractor agrees to immediately assign all subcontracts to the District which the District has chosen to accept.

14.3.2 Non-Appropriation of Funds/ Insufficient Funds.

In the event that sufficient funds are not appropriated to complete the Project or the DISTRICT determines that sufficient funds are not available to complete the Project, DISTRICT may terminate or suspend the completion of the Project at any time by giving written notice to the Contractor. In the event that the DISTRICT exercises this option, the DISTRICT shall pay for any and all work and materials completed or delivered onto the site for which value is received, and the value of any and all work then in progress and orders actually placed which cannot be canceled up to the date of notice of termination. The value of work and materials paid for shall include a factor of fifteen percent (15%) for the Contractor's

overhead and profit and there shall be no other costs or expenses paid to Contractor. All work, materials and orders paid for pursuant to this provision shall become the property of the DISTRICT. DISTRICT may, without cause, order Contractor in writing to suspend, delay or interrupt the Project in whole or in part for such period of time as DISTRICT may determine. Adjustment shall be made for increases in the cost of performance of the Agreement caused by suspense, delay or interruption.

14.4 REMEDIES OTHER THAN TERMINATION

If a default occurs, the District may, without prejudice to any other right or remedy, including, without limitation, its right to terminate the Contract pursuant to Article 14.2, do any of the following:

- (a) Permit the Contractor to continue under this Contract, but make good such deficiencies or complete the Contract by whatever method the District may deem expedient, and the cost and expense thereof shall be deducted from the Contract Price or paid by the Contractor to the District on demand;
- (b) If the workmanship performed by the Contractor is faulty or defective materials are provided, erected or installed, then the District may order the Contractor to remove the faulty workmanship or defective materials and to replace the same with work or materials that conform to the Contract Documents, in which event the Contractor, at its sole costs and expense, shall proceed in accordance with the District's order and complete the same within the time period given by the District in its notice to the Contractor; or
- (c) Initiate procedures to declare the Contractor a non-responsible bidder for a period of two to five years thereafter.

All amounts expended by the District in connection with the exercise of its rights hereunder shall accrue interest from the date expended until paid to the District at the maximum legal rate. The District may retain or withhold any such amounts from the Contract Price. If the Contractor is ordered to replace any faulty workmanship or defective materials pursuant to Paragraph (b) above, the Contractor shall replace the same with new work or materials approved by the Architect and the District, and, at its own cost, shall repair or replace, in a manner and to the extent the Architect and the District shall direct, all work or material that is damaged, injured or destroyed by the removal of said faulty workmanship or defective material, or by the replacement of the same with acceptable work or materials. In no event shall anything in this Paragraph be deemed to constitute a waiver by the District of any other rights or remedies that it may have at law or in equity, it being acknowledged and agreed by the Contractor that the remedies set forth in this Paragraph are in addition to, and not in lieu of, any other rights or remedies that the District may have at law or in equity.

END OF SECTION 00700



CONTRA COSTA COMMUNITY COLLEGE DISTRICT

500 Court Street, Martinez, CA 94553

SUBSTITUTION REQUEST FORM

Contractor Name: _____
Contract #: _____

RFS # _____ Date: _____
 DSA Application #: _____
 Campus: Contra Costa College
 Project No., Name: _____

Contractor pursuant to General Conditions submits the proposed items. If the District accepts such items so described, the undersigned may furnish such item with all necessary labor, materials, equipment and incidentals to perform and complete the Work.

Item No.	SPECIFIED ITEM OR DRAWING	SPECIFICATION SECTION	PROPOSED SUBSTITUTION <small>(and name of Subcontractor if different)</small>

CERTIFICATION

Under penalty of perjury under the Laws of California, I certify that the proposed substitution will be readily available, perform adequately the functions and achieve the results called for by the design concept, be similar in substance to that specified, and be suited to the same use as that specified in Contract Documents.

Contractor: _____
(Please print name of company) Name and Title (print/type) Contractor Authorized Representative Date

A.	Does the substitution affect dimensions shown on Drawings?
B.	Will the undersigned pay for changes to the building design, including engineering and detailing costs caused by the requested substitution?
C.	What effect does the substitution have on other trades?
D.	Will substitution cause change to Project Schedule, or to critical delivery dates? Add ? Shorten ?
E.	Differences between proposed substitution and specified item?
F.	What is the Cost Differential including all mark-ups?
G.	Are Manufacturer's guarantees for the proposed item the same as for item specified? Explain differences.
H.	The undersigned accepts full responsibility for delays caused by redesign of other items of the Work necessitated by substitution.
I.	The undersigned states that the function, appearance and quality are equivalent or superior to the specified item.

<p>A/E Response:</p> <p><input type="radio"/> Accepted</p> <p><input type="radio"/> Not Accepted</p> <p><input type="radio"/> Accepted As Noted</p> <p><input type="radio"/> Received Too Late</p> <p>BY: _____ Date: _____</p>	<p>District Representative Response:</p> <p><input type="radio"/> Accepted</p> <p><input type="radio"/> Not Accepted</p> <p><input type="radio"/> Accepted As Noted</p> <p><input type="radio"/> Received Too Late</p> <p>By: _____ Date: _____</p>
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SECTION 01010
SUMMARY OF WORK

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. All Contract Documents shall be reviewed for applicable provisions related to the provisions in this document, and provisions in the General Conditions and other Specification Sections shall apply to this Section without limitation.

1.2 WORK DESCRIPTIONS WITHOUT FORCE

- A. All general descriptions and/or general summaries of the work noted in this section, or elsewhere within the Contract Documents, are without force and effect on the Contract Work described and indicated in detail the Contract Documents. These general descriptions and summaries are for general reference and descriptive purposes only and in no way offer the complete and concise description of all the Work required by the Contract Documents.

1.3 WORK COVERED BY CONTRACT DOCUMENTS

- A. See Section 00600 CONSTRUCTION AGREEMENT, Article 2, SCOPE OF WORK for the work covered by the Contract Documents.

1.4 CONTRACTS

- A. Perform the work under a single, fixed-price lump sum contract.

1.5 WORK SEQUENCE

- A. During construction operations, various adjoining areas will be occupied and their functions maintained. Temporary construction separations such as walls for sound and dust control, as well as pathway barricades, signage and clearly marked temporary pedestrian path of travel detours will be required and provided by the Contractor.
- B. Scheduling of Contractor's use of the areas and times involved shall be determined in cooperation with the District. Notify the District a minimum of 10-days prior to commencement of work.
- C. Construction activities shall be performed between the hours of 7AM and 5PM, Monday through Friday, unless otherwise required. No Work shall be performed outside the above hours without prior written authorization from the Construction Manager.

1.6 ADDITIONAL WORK SCHEDULE REQUIREMENTS: See Section 01140, Work Restrictions.

1.7 CAMPUS HOLIDAYS

- A. The College is closed with no classes held on the following holidays: Labor Day; Native American Day; Veteran's Day; Thanksgiving; Winter Recess; Martin Luther King Day; President's Day; Spring Recess. The Contractor may work on these days with prior approval by the District.

1.8 USE OF PREMISES

- A. Contractor shall only use the premises for work, storage, staging areas, and vehicular parking as designated in the Contract Documents.

1.9 EXISTING AREA CONDITION SURVEY

- A. Prior to commencement of work, jointly survey the adjacent areas of the project site with the District and the Architect, noting and recording existing damage such as cracks, sags, and other damage on the site plan. Provide copy of the marked-up site plan to the District for their records.
- B. This record shall serve as a basis for determination of subsequent damage to these items due to settlement, movement, demolition, or Contractor's operations.
- C. Existing damage observed shall be marked and the official record of existing damage shall be signed by the parties making the survey.
- D. Cracks, sags, and damage to the area and other items not noted in the original survey but subsequently observed shall be reported immediately to the *District*.
- E. Contractor shall take photographs or video recordings and submit these to the District for review of adequacy and approval in order to comply with this requirement.

1.10 PROTECTION OF EXISTING STRUCTURES AND UTILITIES

- A. The Drawings may not show all existing water, gas, electrical, and hot water lines, and other items known or suspected to exist in the area of the work.
- B. Contractor shall locate these installations before proceeding with demolition or other operations which may cause damage, maintain them in service where appropriate, and repair damage caused by the performance of the Work, at no increase in the Contract Sum.
- C. In addition to notification, if a structure or utility is damaged, take appropriate action as specified in the General Conditions.

1.11 USE AND OCCUPANCY OF WORK PRIOR TO ACCEPTANCE BY DISTRICT

- A. The District may use and occupy the building or other areas of the Site before formal acceptance under the following conditions:
 - 1. A Certificate of Substantial Completion shall be prepared and executed as provided in the Contract Documents. The Certificate of Substantial Completion shall be accompanied by a written endorsement of the Contractor's insurance carrier and surety permitting occupancy by the District during the remaining period of the work.
 - 2. Occupancy by the District shall not be construed as being an acceptance of that part of the Work occupied.
 - 3. The Contractor will not be held responsible for damage to the occupied part of the Work resulting from the District's occupancy.
 - 4. Occupancy by the District shall not be deemed to constitute a waiver of existing claims the District or Contractor may have against each other.
 - 5. Comply with Warranties/Guaranties, and Contract Closeout Procedures for the Work included in Section 00700, General Conditions.
 - 6. The District will pay for utility costs associated with occupancy during construction.

1.12 PROTECTION OF EXISTING IMPROVEMENTS

- A. Provide barricades, coverings, or other types of protection necessary to prevent damage to existing improvements indicated to remain in place.
- B. Protect improvements on adjoining properties as well as those on the District’s property.
- C. Protect existing trees and other vegetation indicated to remain in place, against unnecessary cutting, breaking or skinning of roots, skinning and bruising of bark, smothering of trees by stockpiling construction materials or excavated materials within drip line, excess foot or vehicular traffic, or parking of vehicles within drip line.
- D. Restore any improvements damaged by this work to their original condition as acceptable to the District or other parties or authorities having jurisdiction.

1.13 HAZARDOUS MATERIALS

- A. Comply with all requirements included in other sections of Contract Documents.

1.14 MISCELLANEOUS PROVISIONS

- A. Items shown, described or scheduled to be salvaged will remain the property of the District. Contractor shall coordinate and confirm with the District where the Contractor shall relocate the salvaged items on the Campus grounds.
- B. **RAIN DAYS**
Since the Contract work will start on site during the rainy season, the Contract duration noted in Section 00600 Construction Agreement is based on the Contractor encountering at least 10 workdays of rain or delays due to Rain (e.g., muddy conditions). The Contractor shall include 10 workdays in their Baseline CPM Schedule just prior to the Substantial Completion date milestone. In the event the Project is delayed at the site by rain or rain impacts beyond the 10 work days, the Contractor will be entitled to a non-compensable time extension.

PART 2 - PRODUCTS

Not Used.

PART 3 - EXECUTION

Not Used.

END OF SECTION 01010

SECTION 01030

ALTERNATES

PART 1 – GENERAL

1.1 RELATED DOCUMENTS

- A. All Contract Documents shall be reviewed for applicable provisions related to the provisions in this document, and provisions in the General Conditions and other Division 1 Specification Sections shall apply to this Section without limitation.

1.2 RELATED REQUIREMENTS SPECIFIED IN OTHER SECTIONS

- A. SECTION 00200 – INSTRUCTIONS TO BIDDERS
- B. SECTION 00300 – BID PROPOSAL FORM
- C. SECTION 00700 – GENERAL CONDITIONS
- D. SECTION 01010 – SUMMARY OF WORK
- E. SECTION 01311 – PROJECT MANAGEMENT AND COORDINATION
- F. If listed below in Part 2, also see the Contract Drawings for additional information and requirements regarding the Alternates, as applicable.

1.3 SUMMARY

- A. This Section includes administrative and procedural requirements governing Alternates. Each Alternate is identified by number and describes the basic changes to be made in the Work. A list of Alternates is included in Part 2 of this Section.

1.4 DEFINITIONS

- A. Alternate, as used herein, is a dollar amount proposed by Bidders and stated on the Bid Proposal form for Work defined in the Contract Documents that the District may elect to add to or deduct from the Base Bid, as the case may be, if an Alternate or Alternates, are accepted by the District.

1.5 REQUIREMENTS

- A. Alternate pricing quoted on the Bid Proposal Form will be reviewed by the District, and accepted or rejected at District's sole option. Any accepted Alternate(s) will be identified in the Construction Agreement, or shall be executed by Change Order.
- B. See Section 00300, Bid Proposal Form, Paragraph 1.G for the bid award process.
- C. All Alternates are either "additive" or "deductive" or "no change" to the Lump Sum Base Bid. The Contractor shall quote the amount for each Alternate in the space provided on the Bid Proposal Form.
- D. Failure to either quote an Alternate amount or the insertion of the words "no bid," "none" or words of similar import, may be considered as not completing the Bid Proposal Form and may constitute disqualification of the entire bid at District's sole discretion. Bidders may insert a zero-dollar amount (\$0.00) in the Alternate price line of the Bid Proposal Form if the Bidder proposes to perform the Work of the Alternate with no additional change to the Contract Sum.

- E. The Base Bid and the Alternates are exclusive in their scope of Work. There is no overlap between or among the Base Bid and the Alternates.
- F. The cost of any item of work shall be included only once, in the Base Bid or in the Alternates.
- G. Each Alternate is intended to cover all of the Work required for a complete, finished job.
 - 1. Alternate Work includes all miscellaneous devices, accessory objects, and similar items incidental to or required for a complete installation whether or not indicated as part of the Alternate, but necessary to complete the Alternate Work according to the Contract Documents.

1.6 PROCEDURES

- A. Modify or adjust affected adjacent Work as necessary to completely integrate Work of each accepted Alternate into the Project.
- B. Notification: Immediately following Notice to Proceed, Contractor shall notify each party involved, in writing, of the status of each alternate. Indicate if alternates have been accepted, rejected, or deferred for later consideration. Include a complete description of negotiated modifications to alternates.
- C. The District reserves the right to delete **Add Alternates** at any time within **45** calendar days after the Notice of Award with the corresponding decrease in Contract Price. Contract Time shall remain the same regardless of any add alternate deletions.
- D. Execute accepted Alternate(s) under the same conditions as other Work of this Contract.

PART 2 - PRODUCTS

2.1 DESCRIPTION OF ADDITIVE ALTERNATES

**ADD ALTERNATE 1 - HAZARDOUS CHEMICAL STORAGE
DEMOLITION SCOPE**

- 1. DEMOLISH (E) CMU BLDG, (E) STEM WALLS, AND (E) FOUNDATIONS.
- 2. DEMOLISH ADJACENT CONCRETE ENTRY LANDING AND STAIRS BACK TO (E) WALKWAY. PROVIDE CLEAN PAVING CUTOFF FROM THE DEMOLISHED WALKWAY LEADING FROM PARKING LOT 12 AREA.
- 3. ALL MECHANINCAL, ELECTRICAL, AND PLUMBING TO BE ABANDONED AT POINT OF CONNECTION. CUT BACK AND CAP SO TO OCCUR BELOW GRADE. NO EXPOSED MEP TO REMAIN ABOVE GRADE.

USE CARE NOT TO DAMAGE ANY (E) UTILITIES THAT MAY OVERLAP WITH THE AREA ENCLOSED WITHIN THE ILLUSTRATED DASHED LINE BOUNDARY SHOWN.

REPLACEMENT SCOPE

- 1. FILL AS REQUIRED AT GRADE TO MATCH ADJACENT GRADES AND PROVIDE PLANTING AS REQ'D. REFER TO CIVIL DRAWINGS.

**ADD ALTERNATE 2 – CHILLER UNITS AND PADS
DEMOLITION SCOPE**

- 1. DEMOLISH ALL WOOD FENCE AND POSTS FOOTINGS.

2. REMOVE ALL MECHANICAL, ELECTRICAL AND PLUMBING EQUIPMENT WITHIN THE AREA SHOWN AS BID ALTERNATE.
3. DEMOLISH (E) CONCRETE PAD AND RELATED FOOTINGS.
4. DEMOLISH AND REMOVE (E) STEM WALLS, AND (E) FOUNDATIONS
5. DEMOLISH ADJACENT CONCRETE LANDING AND STAIRS BACK TO (E) WALKWAY. PROVIDE CLEAN PAVING CUTOFF FROM THE DEMOLISHED WALKWAY LEADING FROM PARKING LOT 12 AREA.
6. ALL MECHANICAL, ELECTRICAL, AND PLUMBING TO BE ABANDONED AT POINT OF CONNECTION. CUT BACK AND CAP SO TO OCCUR BELOW GRADE. NO EXPOSED MEP TO REMAIN ABOVE GRADE.

USE CARE NOT TO DAMAGE ANY (E) UTILITIES THAT MAY OVERLAP WITH THE AREA ENCLOSED WITHIN THE ILLUSTRATED DASHED LINE BOUNDARY SHOWN.

REPLACEMENT SCOPE

1. FILL AS REQUIRED AT GRADE TO MATCH ADJACENT GRADES AND PROVIDE PLANTING AS REQ'D. REFER TO CIVIL DRAWINGS.

ADD ALTERNATE 3 - BOILER ROOM BUILDING

DEMOLITION SCOPE

1. DEMOLISH (E) BRICK BUILDING, CONCRETE PAD, AND RELATED FOUNDATIONS.
2. REMOVE ALL MECHANICAL, ELECTRICAL AND PLUMBING WITHIN THE (E) BUILDING. CAREFULLY REMOVE (E) BOILERS WITHING THE BUILDING - TURN OVER BOILERS TO COLLEGE FOR RE-USE.
3. DEMO THE CONCRETE TRENCH, STEEL COVER PLATE ANDRELATED ON THE WEST SIDE OF THE BUILDINGS.
4. DEMOLISH (E) CHAIN LINK FENCE AND POST FOOTINGS SURROUNDING THIS BUILDING.
5. REMOVE ADJACENT PAVER STONES BETWEEN THE CONCRETE PAD AND LOT 12.
6. DEMOLISH AND REMOVE (E) STEM WALLS, AND (E) FOUNDATIONS
7. DEMOLISH ADJACENT CONCRETE LANDING AND STAIRS BACK TO (E) WALKWAY. PROVIDE CLEAN PAVING CUTOFF FROM THE DEMOLISHED WALKWAY LEADING FROM PARKING LOT 12 AREA.
8. ALL MECHANICAL, ELECTRICAL, AND PLUMBING TO BE ABANDONED AT POINT OF CONNECTION. CUT BACK AND CAP SO TO OCCUR BELOW GRADE. NO EXPOSED MEP TO REMAIN ABOVE GRADE.
9. IF FIRE ACCESS ROAD IS USED FOR STAGING FOR DEMOLITION, ROAD MUST BE PROTECTED AT ALL TIMES, EQUIPMENT MUST BE REMOVED DAILY AND LANE CLEAR OF PATH... See Section 01500-11.b, c, d, for further information.

USE CARE NOT TO DAMAGE ANY (E) UTILITIES THAT MAY OVERLAP WITH THE AREA ENCLOSED WITHIN THE ILLUSTRATED DASHED LINE BOUNDARY SHOWN.

REPLACEMENT SCOPE

1. FILL AS REQUIRED AT GRADE TO MATCH ADJACENT GRADES AND PROVIDE PLANTING AS REQ'D. REFER TO CIVIL DRAWINGS.

NONE.

PART 3 - EXECUTION

3.1 GENERAL

- A. Execute accepted alternates under the same conditions as other Work of this Contract.
- B. Coordination: Modify or adjust affected Work as required to completely and fully integrate that Work into the Project.

END OF SECTION 01030

SECTION 01050
FIELD ENGINEERING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. All Contract Documents shall be reviewed for applicable provisions related to the provisions in this document, and provisions in the General Conditions and other Specification Sections shall apply to this Section without limitation.

1.2 SUBMITTALS

- A. Contractor shall submit name and address of Surveyor and Professional Engineer to District for approval prior to their work on the Project.
- B. On request of District and Architect, Contractor shall submit documentation to verify accuracy of field engineering work, at no additional cost to the District.
- C. At completion of the Work, Contractor shall submit a certificate signed by a licensed engineer or surveyor certifying that all elevations and locations of improvements are in conformance with Contract Documents.

1.3 REQUIREMENTS

- A. Contractor shall provide and pay for field engineering services by an engineer licensed in the State of California, required for the Project, including, without limitation:
 - 1. Survey work required in execution of the Project.
 - 2. Civil or other professional engineering services specified, or required to execute Contractor's construction methods.

1.4 QUALIFICATIONS OF SURVEYOR OR ENGINEERS

- A. Contractor shall only use a qualified licensed engineer or registered land surveyor, approved by the District, of the discipline required for specific service on Project, licensed in the State of California.
- B. Submit evidence of Engineer's errors and omissions insurance coverage to District, in the form of a current Insurance Certificate.

1.5 SURVEY REFERENCE POINTS

- A. Existing basic horizontal and vertical control points for the project are those designated on the Drawings.
- B. Contractor shall locate and protect control points prior to starting Site Work and preserve all permanent reference points during construction. In addition, Contractor shall:
 - 1. Make no changes or relocation without prior written notice to District and Architect.
 - 2. Report to District and Architect when any reference point is lost or destroyed, or requires relocation because of necessary changes in grades or locations.

3. Require surveyor to replace project control points based on original survey control that may be lost or destroyed.
4. Contractor to locate and protect existing survey control and reference points.
5. Control datum for survey is that indicated on Drawings.
6. Protect survey control points prior to starting Site Work; preserve permanent reference points during construction.
7. Promptly report to Architect, District, and Project Inspector the loss or destruction of any reference point or relocation required because of changes in grades or other reasons.
8. Replace dislocated survey control points based on original survey control. Make no changes without prior written notice.

1.6 PROJECT RECORD DOCUMENTS

- A. Maintain complete, accurate log of control and survey work as it progresses. Indicate dimensions, locations, angles, and elevations of construction and Site Work.
- B. Submit Record Documents as required under provisions of these Contract Documents.

1.7 EXAMINATION

- A. Verify locations of survey control points prior to starting Work. Promptly notify District and Architect of any discrepancies discovered.

1.8 SURVEY REQUIREMENTS

- A. Provide field engineering services. Utilize recognized engineering survey practices.
- B. Establish a minimum of two permanent benchmarks on Site, referenced to established control points. Record locations, with horizontal and vertical data, on Project Record documents.
- C. Establish lines and levels, locate and lay out by instrumentation and similar appropriate means:
 1. Site improvements including pavements; stakes for grading, fill and topsoil placement; utility locations, slopes, and invert elevations.
 2. Grid or axis for structures.
 3. Building foundation, column locations, and ground floor elevations.
- D. Periodically verify layouts by same means.

PART 2 – PRODUCTS - Not Used

PART 3 – EXECUTION

- 3.1** Contractor is responsible for meeting all applicable codes, OSHA, and other safety and shoring requirements.
- 3.2** Contractor is responsible for any re-surveying required by correction of nonconforming work with no additional cost to the District or its representatives.

END OF SECTION 01050

SECTION 01140
WORK RESTRICTIONS

PART 1 – GENERAL

1.1 RELATED DOCUMENTS

- A. All Contract Documents shall be reviewed for applicable provisions related to the provisions in this document, and provisions in the General Conditions and other Division 1 Specification Sections shall apply to this Section without limitation.

1.2 SUMMARY OF WORK RESTRICTION REQUIREMENTS

- A. Prior to the start of Work, Contractor shall familiarize itself with the Work Restrictions as they relate to all Work required by the Contract Documents.
- B. Temporary Work Activity Plan shall include:
 - 1. Full size drawing (36"x42") of site plan showing the proposed locations and dimensions of temporary facilities and activities, including but not limited to, all proposed trailers, equipment and material storage areas on the Project Site; safe and ADA complaint access (ingress/egress) for pedestrians and vehicles around the construction areas; proposed haul routes; all temporary construction, and way-finding signage; temporary fenced area(s), noise and safety barriers, and dust partitions; and temporary measures to maintain continuous and uninterrupted code compliant use of all occupied and surrounding areas impacted by construction activities. Identify any areas that require temporary paving for stabilization or prevention of tracking of mud, and for ADA complaint ingress and egress. Indicate if the use of supplemental or other staging areas might be required. **Also see Section 01500 Temporary Facilities and Control for additional requirements.**
 - 2. Contractor shall submit two (2) hard copies at the pre-construction meeting, and email Adobe PDF Format of the initial submittal of the Temporary Work Activity Plan for review by the District, Architect, and by personnel from the Campus (e.g., Buildings & Grounds, Police Department, and other representatives).
- C. Contractor shall construct dust partitions and other barriers as required prior to the start of abatement or demolition activities, whichever may occur first, and they must remain in place until the completion of that activity where required.
- D. Contractor shall perform and complete all Temporary Work Activities to ensure the following:
 - 1. The continuous and uninterrupted use of all occupied areas or areas within buildings that require 24/7 utility services, including but not limited to the applicable power, data, telephone, waterline, fire alarm system, fire sprinkler system mechanical, HVAC, gas, storm, sewage, plumbing, and electrical systems serving these areas.
 - 2. Protection of students, staff, faculty and personnel in occupied areas and surrounding and adjacent areas from the hazards and dust associated with construction.
 - 3. The work areas, roads, parking lots, and streets are to be kept clear, clean, and free of loose debris, construction materials and partially installed work which would create a safety hazard or interfere with subcontractor and personnel duties and traffic. **The Contractor shall sweep the areas clean at the end of each workday and make every effort to keep dust and noise to a minimum at all times.**

4. Prior to starting work, the Contractor shall provide a proposed schedule of temporary interruptions or shutdown of any utility or electrical/mechanical systems to the District Representatives. The Contractor shall provide written request **(10) working days** prior to the desired time for the proposed interruption(s). Work shall be performed at times other than the Campus's normal hours of operation, or as directed by the District's Representative. Temporary interruptions shall be completed prior to the start of the next business day at the Campus to maintain continuous and uninterrupted use of Campus facilities and utility systems.

1.3 SUMMARY OF WORK RESTRICTIONS

- A. **General:** All Temporary Work Activities must be completed within the timelines, work shift times, and the scheduled time period as required by the Contract Documents. Comply with the following:
 1. The Temporary Work Activity Plan shall be approved by the District prior to any Work starting on the Project Site.
 2. **Contractor shall have all temporary fencing, signage, ADA compliant pathways and other temporary measures described in Paragraph 1.2 above installed, operational and accepted by the District prior to starting abatement and building demolition or other Work as applicable, unless otherwise noted in Article 1.3B below.**
- B. **Time Related Work Restrictions within the Contract Time**
 1. Although the Contract Time is a total of **200 calendar days** between the Notice to Proceed and Substantial Completion, as articulated in Section 00600, Construction Agreement, Work by the Contractor is restricted and limited to specific time periods at specific locations during this contract duration as follows:
 - 1.1 **Commencement of Work on the Project Site: Other than the removal of trees and vegetation shown to be removed,** Contractor cannot and shall not start any Work on the project site until **35 calendar days after the Notice to Proceed**, unless the District provides written approval. The time between the Notice to Proceed and commencing Work on the project site shall be used for completing all off-site requirements (e.g., obtain approval of the Temporary Work Activity Plan; transmittal of all required submittals; submittal and approval of the CPM schedule; etc.)
 - 1.2 **Removal of Trees and Vegetation by No Later than February 28, 2022. After the Notice to Proceed is issued, the Contractor shall identify all trees and vegetation on site shown to be removed and meet with the District to confirm before the trees are cut down and removed from the project site. Due to the Bird Nesting Season starting on March 1, 2022, all trees and vegetation shown to be removed shall be removed from the project site prior to March 1, 2022. Contractor shall have all temporary fencing installed prior to commencement of cutting down or removing trees and vegetation.**
 - 1.3 **Sunday Work:** Work on Sunday is not allowed, unless otherwise approved by the District.

1.4 **Finals Week:** The Contractor shall not work between **May 16, 2022 and the close of business on May 20, 2022**, unless otherwise approved by the District/College, as this is finals week and noise generation activities will not be permitted.

2. The Contractor is responsible for its own means and methods to comply with these work restrictions, and to submit its schedule in accordance with Section 00700, Article 3.8.

C. Other Project Requirements and Restrictions

1. The Contractor's staging area for trailers, construction vehicles, construction equipment and materials is restricted to the general area within the temporary construction fencing shown on **Drawing C2.00 Limit of Work Boundary**.

2. **Due to the one lane vehicular road north and east of the project site, the Contractor is cautioned not to attempt to drive the wrong way (i.e., headed east) on this road. Violators will be ticketed by the Campus Police Services.**

3. Truck traffic, material deliveries and equipment deliveries on this one-way road to the project site shall be closely monitored and controlled by the Contractor to avoid any delays to other vehicles using this road by faculty and students. The Contractor shall include delivery milestones in its Project CPM Schedule, and provide written notice at least two (2) workdays to the District and to the Police Services for all deliveries. Any material or equipment deliveries that could potentially delay traffic on this one-way road will have to be delivered after normal business hours, unless otherwise approved by the District. Contractor truck deliveries that stop traffic on this road or other roads on Campus could be subjected to being ticketed by the Campus Police Services.

4. **Truck Hauling Routes.** Obtain City of San Pablo approval for preferred construction traffic routing over public streets and/or other construction truck access and egress from public streets to the Site. Contractor shall avoid routing trucks through residential areas. Prohibit mobilization and demobilization of heavy construction equipment and trucks on residential streets. No construction truck access or egress is permitted on Mills Avenue.

PART 2 - PRODUCTS

2.1 MATERIALS

A. All labor, equipment, materials, and all other requirements shall be provided and will be the sole responsibility of the Contractor for execution of entire work described in this specification section.

PART 3 - EXECUTION

3.1 MEANS AND METHODS OF CONSTRUCTION

A. Contractor to provide and shall be responsible for any and all means and methods that will be constructed, implemented and/or maintained on the site for all work described above.

END OF SECTION 01140

SECTION 01311

PROJECT MANAGEMENT AND COORDINATION

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. All Contract Documents shall be reviewed for applicable provisions related to the provisions in this document, and provisions in the General Conditions and other Specification Sections shall apply to this Section without limitation.

1.2 SUMMARY

- A. This Section specifies the administrative requirements and includes descriptions of required project coordination for the work including, but not limited to, the following:
 - 1. Coordination
 - 2. Coordination of Contract Closeout

1.3 COORDINATION

- A. Coordinate scheduling, submittals, and Work of the various Sections of Specifications to assure efficient and orderly sequence of Work, with provisions for accommodating items to be installed later and for accommodating items to be installed by other District contractors.
- B. Resolve differences or disputes concerning coordination, interference, or extent of Work of the various Sections of the Specifications.
- C. Coordinate completion and cleanup of Work of separate Sections in preparation for Substantial Completion.
- D. Coordinate requests for substitutions to assure compatibility of space, of operating elements, and effect on work of other sections.
- E. Cooperate with District and District suppliers and/or contractors during move-in and occupancy of the completed Work.
- F. Contractor shall coordinate construction operations and means and method of construction included in different Sections of the Specifications to ensure efficient and orderly installation of each part of the Work. Coordinate construction operations, included in different Sections that depend on each other for proper installation, connection, and operation.
 - 1. Coordinate structural, mechanical, and electrical elements prior to installation. All penetrations of structural elements must first receive approval of Architect and District pursuant to the submittal process described in Section 00700, General Conditions. Rerouting of ductwork, piping, or conduit and resulting changes to other work caused by failure to coordinate beforehand is the responsibility of the Contractor and shall not be considered justification for either additional cost or time.
 - 2. Schedule construction operations in sequence required to obtain the best constructed results where installation of one part of the Work depends on installation of other components, before or after its own installation.

3. Coordinate installation of different components with other contractors or other trades to ensure maximum and appropriate accessibility for required maintenance, service, and repair. Where availability of space is limited, coordinate installation of different components to ensure maximum and appropriate performance and accessibility for required maintenance, service, operations, and repair of all components, and building systems.
4. Make adequate provisions to accommodate items scheduled for later installation.
5. The manner in which the Specifications are divided into Divisions and Sections is not intended to indicate division of work between trades nor indicate trade union or jurisdictional agreements.
 - a. Assign and subcontract construction activities, and employ workers in a manner that will not risk jurisdictional disputes that could result in conflicts, delays, claims, or losses.

1.4 ADMINISTRATIVE COORDINATION

- A. Coordinate scheduling and timing of required administrative procedures with other construction activities and activities of other contractors to avoid conflicts and to ensure orderly progress of the Work.
- B. Project Documents Management and Exchange
 1. The Contractor, District, IOR, and Architect shall mutually utilize an internet based system for the exchange and tracking of Project documents. The system to be utilized for this Project is EADOC, by Bentley Systems, Inc.
 2. The District will provide training for and access to the EADOC system for key Project team members, and will also pay the system usage fees.
 3. To the maximum extent feasible, document exchange between and among the Contractor, District, IOR, and Engineer shall occur electronically via the EADOC system. Such documents include, but are not limited to:
 - a. Product data and other submittals
 - b. ASI's, Field Directives, and similar documents
 - c. RFI's
 - d. Payment applications
 - e. Change Orders
 - f. Schedules
 - g. Correspondence
 - h. Other documents and deliverables as required by the Contract Documents.
 4. All Project documents entered into the EADOC system will be stored remotely at a secure Bentley Systems, Inc. location.
 5. EADOC demonstration videos and screenshots can be found at the following link: <http://eadocsoftware.com/demo/>.

1.5 COORDINATION OF THE WORK

- A. Coordinate use of project space and sequence of installation of mechanical, electrical, structural, and other Work which is indicated diagrammatically on Drawings. Follow routings shown for pipes, ducts, and conduits as closely as practicable, with due allowance for available physical space; make runs parallel with lines of building. Utilize space efficiently for maximum and appropriate accessibility for other installations, for maintenance, service, operations, and for repairs.
- B. Contractor shall use large scale drawings, if their preparation is required as part of Work of these specifications, together with shop drawings if applicable and layout drawings of other affected sections of these specifications to check, to coordinate, and to integrate the Work of various sections to prevent interferences.
- C. Perform and complete checking and coordination before commencing construction in the affected areas.
- D. In finished areas, except as otherwise shown, conceal pipes, ducts, and wiring in the construction. Coordinate locations of plumbing, fixtures, electrical fixtures, and fixtures and outlets with finish elements.

1.6 CONSERVATION

- A. Contractor shall coordinate construction activities to ensure that operations are carried out with consideration given to conservation of energy, water, and materials.
 - 1. Salvage materials and equipment involved in performance of, but not actually incorporated into, the Work. Refer to other Sections of the Specifications for disposition of salvaged materials that are designated as District's property.

1.7 MEANS AND METHODS

- A. Contractor is solely responsible for construction means, methods, techniques, sequences, and procedures for performing all Work.

1.8 ADMINISTRATIVE AND SUPERVISORY PERSONNEL

- A. Contractor shall provide other administrative and supervisory personnel as required for proper performance of the Work.
 - 1. Include specific or dedicated personnel required for coordination of operations with other contractors.

1.9 COORDINATION WITH WORK BY DISTRICT

- A. Coordinate service connections for District-furnished and District-installed equipment. Verify that service connections are correct sizes and in required locations.
- B. Coordinate support and anchorage for equipment furnished and installed by the District. Provide blocking and backing as shown or directed to facilitate installation of equipment by others.

1.10 PERIODIC VERIFIED REPORTS

- A. The Contractor shall complete and submit the Final Verified Report required by DSA when applicable. In addition to other conditions precedent to Final Payment, the Contractor's completion and submission of the Final Verified Report is an express condition precedent to the District's obligation to make the Final Payment. In addition to completion and submission of the Final Verified Report, as a material obligation under the Contract Documents, the Contractor shall comply all DSA requests for reports or other data relating to the Work, the status thereof or conformity of the Work to the Contract Documents.

PART 2 - PRODUCTS

1.11 EADOC Construction Management Software

- A. The District is using EADOC Construction Management Software for the management of this project. The system is a web-based user-interface that is accessible by typical web-browsers. The Contractor and its subcontractors are required to use this system for communication with the District. The District will provide the Contractor limited web-based training prior to the start of the Project.

PART 3 - EXECUTION - Not Used.

END OF SECTION 01311

SECTION 01312
PROJECT MEETINGS

PART 1 – GENERAL

1.1 RELATED DOCUMENTS

- A. All Contract Documents shall be reviewed for applicable provisions related to the provisions in this document, and provisions in the General Conditions and Specification Sections shall apply to this Section without limitation.

1.2 SUMMARY

- A. This Section specifies administrative requirements and provides descriptions of the required project meetings for the Work and all phases of the Project. These meetings include, but not limited to, the following:
 - 1. Preconstruction Conference
 - 2. Schedule Review Meetings
 - 3. Weekly Project Progress Meetings
 - 4. Construction Schedule and Application for Payment Meetings
 - 5. Special Meetings

1.3 PRECONSTRUCTION CONFERENCE

- A. District will schedule and conduct the Preconstruction Conference at a time and place to be determined.
- B. Contractor and all major subcontractors, as requested by the District, shall attend the Preconstruction Conference.
- C. Meeting agenda will include, but is not limited to, discussion of the following items:
 - 1. Construction Schedules
 - 2. Personnel and vehicle permit procedures
 - 3. Use of premises
 - 4. Location of Contractor's on-Site facilities
 - 5. Security
 - 6. Housekeeping
 - 7. Submittal and RFI procedures
 - 8. Inspection and testing procedures, on-Site and off-Site
 - 9. Utility shutdown procedures
 - 10. Control and reference point survey procedures
 - 11. Injury and Illness Prevention Program
 - 12. Schedule of Values

13. Schedule of Submittals
14. Project Directory
15. Emergency Contact List

1.4 SCHEDULE OF VALUES & CONSTRUCTION SCHEDULE MEETING

- A. See Section 00700, Contract General Conditions, for requirements. Meetings will be held as requested by the District, or as required by the District. Contractor shall anticipate monthly schedule update review meetings to monitor progress, and to review proposed changes to the schedule.

1.5 SHOP DRAWINGS & SUBMITTALS SCHEDULE MEETING

- A. See Section 00700, Contract General Conditions, for specific requirements. Meetings will be held as requested by the District, or as required by the District.

1.6 WEEKLY PROGRESS MEETINGS

- A. Weekly Progress Meetings will be scheduled throughout duration of Work at a time acceptable to the District. Weekly Progress Meetings will be held weekly unless otherwise directed by District.
 1. Meetings shall be held at Construction Manager's on-site office, unless otherwise directed by the District.
 2. The District's Construction Manager will prepare an agenda, if needed.
 3. The District or Designer will record meeting notes of the Weekly Progress Meetings. Within 4 working days after the meeting, the District or Designer will distribute minutes to attendees via e-mail, and to those affected by decisions made at the meeting. Attendees can either submit comments or additions to the minutes within 3 working days. The minutes will constitute a final documentation of the results of meeting.
- B. Weekly Progress Meetings shall be attended by the Contractor's project manager, project engineer, and job superintendent, District Construction Manager, Designer, the Inspector of Record, and others as appropriate to agenda topics for each meeting.
- C. Agenda will contain the following items, as appropriate:
 1. Review, revise as necessary, and approve previous meeting minutes
 2. Review Work progress since last meeting
 3. Status of Construction Schedule, delivery schedules, adjustments
 4. Submittal, RFI, and Change Order status
 5. Review of the Contractor's safety program activities and results, including report on any serious injury and/or damage accidents
 6. Review of non-conforming Work (if any)
 7. Other items relating to or affecting progress of Work

1.7 Special Meetings

- A. District may call special meetings by notifying the desired participants. Special meetings may be held without advance notice in emergency situations.
- B. At any time during the progress of Work, District shall have authority to require Contractor to attend a meeting with any or all the subcontractors engaged in the Work, or in other work, and notice of such meeting shall be duly observed and complied with by Contractor.
- C. Contractor shall schedule and conduct its own periodic coordination meetings as necessary to discharge coordination responsibilities.
- D. Contractor shall give District 5 workdays written notice of its coordination meetings. Contractors shall maintain and distribute minutes of coordination meetings to District. Attendees shall have 3 workdays to submit comments or additions to minutes. Minutes will constitute final documentation of results of coordination meetings.

1.8 GUARANTEES/WARRANTIES, BONDS, AND SERVICE & MAINTENANCE CONTRACTS REVIEW MEETING

- A. *Not Used*
- B. *Not Used*

PART 2 - PART 2 – PRODUCTS - Not Used

PART 3 - PART 3 – EXECUTION - Not Used

END OF SECTION 01312

SECTION 01340
ADMINISTRATIVE FORMS & LOGS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. All Contract Documents shall be reviewed for applicable provisions related to the provisions in this document, and provisions in the General Conditions and other Specification Sections shall apply to this Section without limitation.

1.2 SUMMARY

- A. This section specifies the information and format requirements for administrative forms and logs.

1.3 ADMINISTRATIVE FORMS & LOGS

- A. The Contractor shall use District provided administrative forms for the Work. Administrative forms and logs include, but are not limited to, the following:
 - 1. Transmittal Form
 - 2. Submittal Transmittal Form
 - 3. Request for Information Form
 - 4. Substitution Request Form (form available at end of Section 00700, General Conditions)
 - 5. 3-Week Projected Construction Schedule Form
 - 6. 3-Week Testing & Inspection Schedule Form
 - 7. Proposed Change Order Form*
 - 8. Change Order Form*
 - 9. Request for Information Log Form
 - 10. Submittal Log Form
 - 11. Proposed Change Order Log Form
 - 12. Change Order Log Form
 - 13. Contractor's Proposal for Contract Modification Form* (includes sample numbers to demonstrate calculations only)
 - 14. Contractor Production Report
 - 15. Construction Directive Form
- B. Forms generated by project management software may be substituted if substitution forms contain essentially the same information as shown in these contract documents. Allowance for the use of substitute forms is at the sole discretion of the District, and shall be requested and approved before use of the substitute form. Forms marked with an asterisk (*) may NOT be substituted under any condition.
- C. Microsoft Excel files of these forms are available for Contractor use from the District.

1.4 FORMS INCORPORATED BY REFERENCE

A. NOT APPLICABLE

1.5 CONTRACTOR RESPONSIBILITIES

A. Nothing in this Section, including but not limited to, the above forms and log forms shall be construed to limit, relieve, or release Contractor from liability to District for any damages sustained as a result of inaccurate or incorrect information supplied by the Contractor.

PART 2 – PRODUCTS - Not Used.

PART 3 – EXECUTION - Not Used.

END OF SECTION 01340

SECTION 01400
QUALITY CONTROL REQUIREMENTS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. All Contract Documents shall be reviewed for applicable provisions related to the provisions in this document, and provisions in the General Conditions and other Division 1 Specification Sections shall apply to this Section without limitation.

1.2 SUMMARY

- A. This Section includes Administrative and Procedural Requirements for Quality Control and Quality Assurance Services includes, but not limited to, the followings:
 - 1. Quality assurance and control of installation.
 - 2. References.
 - 3. Inspection and testing laboratory services
 - 4. Manufacturers' field services and reports
 - 5. Field sample
 - 6. DSA Project Inspector, if applicable
 - 7. Inspection by the Division of the State Architect, if applicable
 - 8. Conflicts

1.3 QUALITY ASSURANCE/CONTROL OF INSTALLATION

- A. Monitor quality control over suppliers, manufacturers, Products, services, site conditions and workmanship, to produce Work of specified quality.
- B. Comply fully with manufacturers' written instructions, including each step in sequence.
- C. When manufacturers' instructions conflict with Contract Documents, request clarification from District's Representative before proceeding.
- D. Comply with specified standards as a minimum quality for the Work except when more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.
- E. All Work shall be performed by persons qualified to produce workmanship of specified quality.
- F. Secure products in place with positive anchorage devices designed and sized to withstand stresses, vibration, physical distortion or disfigurement.
- G. Contractor's Line of Authority: Contractor shall provide one person who shall be both knowledgeable and responsible for all work to be performed on the Project at all times during normal work hours. In Contractor's absence, Contractor's appointed representative shall be responsible for all directions given him and said directions shall be binding as if given to the Contractor. Contractor's representative shall be responsible to coordinate all Work to be performed on the Project.

- H. Shop and field work shall be performed only by mechanics skilled and experienced in the fabrication and installation of the work involved. All work on this Project shall be done in accordance with the best practices of the various trades involved and in accordance with the Contract Documents, approved shop drawings and these specifications.
- I. All work shall be erected and installed plumb, level, square and true and in proper alignment and relationship to the work of other trades. All finished work shall be free from defects. The District's Representatives reserve the right to reject any materials and workmanship that are not considered to be of the highest standards of the trades involved. Any such inferior material or workmanship shall be removed and replaced at no additional cost or time impact to the District.
- J. The specifications and recommendations of the manufacturer whose materials are used shall be strictly adhered to during the application or installation of materials. Manufacturer's specifications, installation instructions, and testing and startup directions shall be available for inspection on Site.
- K. Any additional work beyond that specified or illustrated in the Contract Documents, or any modification thereto, that is necessary to obtain the guarantees specified in the Contract Documents shall be provided by the Contractor without any additional cost or time impact to the District.

1.4 REFERENCES

- A. Conform to reference standards in force on the most recent date of issue of the approved Contract Documents.
- B. When specified reference standards conflict with Contract Documents, request clarification from District's Representative before proceeding.
- C. The contractual relationship of the parties to the Contract shall not be altered from the Contract Documents by mention or inference otherwise in any reference document.
- D. The Contractor shall be responsible for being current and knowledgeable for all building codes involved for all trades under his direction.
- E. Provide all work and materials in full in accordance with the latest applicable Rules and Regulations of the California Code of Regulations Title 24 Building Code Standards, the State Fire Marshal, Safety Orders of the Division of Industrial Safety, and any other applicable laws or regulations. Nothing in these plans or specifications is to be construed to permit Work not conforming to these Codes.
- F. American Society for Testing and Materials (ASTM):
 - 1. ASTM 548: Guide for General Criteria Used for Evaluating Laboratory Competence.
- G. Code of Federal Regulations (CFR):
 - 1. 29 CFR 1910, Subpart A, Section 1910.7: Definitions and Requirements for a National Recognized Testing Laboratory.
- H. NIST: National Institute of Standards and Technology.

- I. Furnish all material and labor required to comply with these Rules and Regulations without any additional cost to District.

1.5 MANUFACTURERS' FIELD SERVICES AND REPORTS

- A. When specified in individual Specification Sections, require material or product suppliers or manufacturers to provide qualified staff personnel to observe site conditions, conditions of surfaces and installation, quality of workmanship, start-up of equipment, testing, adjusting, and balancing of equipment as applicable, and to provide instructions when necessary.
- B. Provide four (4) sets of Manufacturer's Field Representative report to District and Architect for review within 5 days of field observation.
- C. Manufacturer's Field Service: Where indicated, engage a factory-authorized service representative to inspect field-assembled components and equipment installation, including service connections.

1.6 FIELD SAMPLES

- A. Install field samples at the site for District and Architect review as required by individual Specifications Sections.
- B. Samples accepted by the Architect in writing represent the quality level required for the Work.
- C. Where a field sample is specified in individual sections to be removed, clear area after field sample has been accepted by Architect.

1.7 PROJECT INSPECTOR

- A. ~~District will employ a Project Inspector in accordance with the regulations of the DSA and subject to the provision of Part 1, Title 24, CCR. Project Inspector's authority, rights and duties shall be as set forth in Section 4-342, Part 1, Title, 24, CCR.~~

1.8 INSPECTION BY THE DIVISION OF THE STATE ARCHITECT

- A. ***This is not a DSA-monitored project, and a DSA Inspector of Record is not required.***

1.9 CONFLICTS

- A. Contractor shall comply with rules of documents interpretation as indicated in Contract General Conditions including, but not limited to the following items:
 1. Contract Documents take precedence over statutory requirements or standard when requiring materials of higher quality or performance, or larger sizes or capacity, or greater protection, safety or quantity than required by said codes or standards.
 2. This shall not operate to allow deviations from code requirements, prior approvals and other provisions as specified.
 3. Modifications to published statutory requirements currently adopted or enforced by regulating agencies having jurisdiction shall take precedence over said published requirements.

- B. Conflicts within Contract Documents and/or between Project Manual (including specifications) Drawings, Addenda: The more stringent requirement shall govern.
- C. Subcontractor, supplier, and installer work may be called for in any section of the Contract Documents, Project Manual Specifications, Drawings and Addenda. Work by any one discipline is not limited to any specification section of the Project Manual, Drawings, Addenda, and Contract Documents shall be bid in total and not in parts.
- D. If compliance with two or more standards is specified and the standards establish different or conflicting requirements for minimum quantities or quality levels, comply with the most stringent requirement. Refer uncertainties and requirements that are different, but apparently equal, to Architect for a decision before proceeding. Contractor shall, within (15) working days, notify the Architect in writing for the context of requirements.
- E. Minimum Quantity or Quality Levels: The quantity or quality level shown or specified shall be the minimum provided or performed. The actual installation may comply exactly with the minimum quantity or quality specified, or it may exceed the minimum within reasonable limits. To comply with these requirements, indicated numeric values are minimum or maximum, as appropriate, for the context of requirements. Contractor shall, within (15) working days, notify any uncertainties to the Architect and District for a decision before proceeding.

1.10 QUALITY CONTROL, GENERAL

- A. District will provide inspections, tests, and similar quality control services required performed by the Division of the State Architect. All other tests are Contractor's responsibility.
 - 1. District will furnish Contractor with names, addresses, and telephone numbers of testing agencies engaged and description of types of testing and inspecting they are engaged to perform.
 - 2. Costs for retesting and re-inspecting construction that replaces or is necessitated by work that failed to comply with the Contract Documents will be charged to Contractor, and the Contract Sum will be adjusted by Change Order.
 - 3. See Section 00700, Contact General Conditions, **Article 13.5** for additional requirements.

1.11 QUALITY CONTROL: LABORATORY, TESTS, AND REPORTING REQUIREMENTS

- A. Construction materials testing laboratories must be accredited by a laboratory accreditation authority and will be required to submit a copy of the Certificate of Accreditation and Scope of Accreditation.
 - 1. The laboratory's scope of accreditation must include the appropriate ASTM standards (E 329, C 1077, D 3666, D 3740, A 880, E 543) listed in the technical sections of the specifications.
- B. Laboratories engaged in Hazardous Materials Testing shall meet the requirements of OSHA and EPA. The policy applies to the specific laboratory performing the actual testing, not just the Corporate Office.
- C. Laboratory Accreditation Authorities: Laboratory Accreditation Authorities include the National Voluntary Laboratory Accreditation Program (NVLAP) administered by the

National Institute of Standards and Technology at:
<http://ts.nist.gov/ts/htdocs/210/214/214.htm>

American Association of State Highway and Transportation Officials (AASHTO) program at:
<http://www.transportation.org/aashto/home.nsf/frontpage>

International Accreditation Services, Inc. (IAS) at: <http://www.iasonline.org>.

American Association for Laboratory Accreditation (A2LA) program at: <http://www.a2la.org/>.

- D. Capability Check: The District retains the right to check laboratory equipment in the proposed laboratory and the laboratory technician's testing procedures, techniques, and other items pertinent to testing, for compliance with the standards set forth in this Contract.
- E. Test Results: Cite applicable Contract requirements, tests or analytical procedures used. Provide actual results and include a statement that the item test or analyzed conforms or fails to conform to specified requirements.
 - 1. If the item fails to conform, notify the District immediately. Conspicuously stamp the cover sheet for each report in large red letters "CONFORMS" or "DOES NOT CONFORM" to the specification requirements, whichever is applicable.
 - 2. Test results must be signed by a testing laboratory representative authorized to sign certified test reports.
 - 3. Furnish the signed reports, certifications, and other documentation to the District via the QC Manager.
 - 4. Furnish the signed reports, certifications, and a summary report of field tests at the end of each month to the District. Attach a copy of the summary report to the last daily Contractor Quality Control Report of each month.

1.12 NOTIFICATION ON NON-COMPLIANCE

- A. The District will notify the Contractor of any detected non-compliance with the Contract. Take immediate corrective action after receipt of such notice. Such notice, when delivered to the Contractor at the work site, shall be deemed sufficient for the purpose of notification. If the Contractor fails or refuses to comply promptly, the District may issue an order stopping all or part of the work until satisfactory corrective action has been taken. No part of the time lost due to such stop orders will be made the subject of claim for extension of time for excess costs or damages by the Contractor.

PART 2 - PRODUCTS - Not Used.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verify existing site conditions and substrate surfaces are acceptable for subsequent Work. Beginning new Work constitutes acceptance of existing conditions by the Contractor.
- B. Verify existing substrate is capable of structural support or attachment of new Work being applied or attached.
- C. Examine and verify specific conditions described in individual specification sections.

- D. Verify utility services are available, of correct characteristics, and in correct locations.

3.2 TEST AND INSPECTION LOG

- A. Prepare a record of tests and inspections. Include the following:
 - 1. Date test or inspection was conducted.
 - 2. Description of the Work tested or inspected.
 - 3. Date test or inspection results were transmitted to Architect.
 - 4. Identification of testing agency or special Inspector conducting test or inspection.
- B. Maintain test and inspection log at project site. Post changes and modifications as they occur. Provide access at the Project site to the District and Architect, during normal working hours, to Contractor generated test and inspection logs

3.3 PREPARATION

- A. Clean substrate surfaces prior to applying next material or substance.
- B. Seal cracks or openings of substrate prior to applying next material or substance.
- C. Apply manufacturer required or recommended substrate primer, sealer, or conditioner prior to applying new material or substance in contact or bond.

3.4 PREPARATION AND PROTECTION

- A. General: On completion of testing, inspecting, sample taking, and similar services, repair damaged construction and restore substrates and finishes.
- B. Protect construction exposed by or for quality-control service activities.
- C. Repair and protection are Contractor's responsibility, regardless of the assignment of responsibility for quality-control services.

END OF SECTION 01400

SECTION 01415

MITIGATION MONITORING REGULATORY REQUIREMENTS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. All Contract Documents shall be reviewed for applicable provisions related to the provisions in this document, and provisions in the General Conditions and other Specification Sections shall apply to this Section without limitation.

1.2 SUMMARY

- A. This Mitigation Monitoring and Reporting Program (MMRP) was formulated based on the findings of the Initial Study/Mitigated Negative Declaration (IS/MND) prepared for the Contra Costa College Improvement Implementation Project. This MMRP is in compliance with Section 1509 of the *CEQA Guidelines*, which requires that the Lead Agency “adopt a program for monitoring or reporting of the revisions which it has required in the project and the measures it has imposed to mitigate or avoid significant environmental effects.” The MMRP lists mitigation measures recommended in the IS/MND and identifies mitigation monitoring requirements.
- B. The District has attempted to insert these MMRP requirements into the various other Specification Sections that are related to the nature of each mitigation measure. This Section is included to provide a consolidated location for all of the CEQA requirements. Where measures are found in any of the Contract Documents that conflict with these measures, the more stringent measure shall apply.
 - 1. Table 1 presents the mitigation measures identified for the Project. Each mitigation measure is numbered according to the topical section to which it pertains in the IS/MND. As an example, Mitigation measure AIR-1 is the first mitigation measure identified in the IS/MND for the Project.
 - a. Elements of the MMRP which have been stricken out do not apply to this project.
 - b. The first column of Table 1 identifies the mitigation measure from the IS/MND.
 - c. The second column, entitled “Action and Implementation Timing,” describes each mitigation measure.
 - d. The third column, “Party Responsible for Monitoring,” names the party ultimately responsible for ensuring that the mitigation measures are implemented.
 - e. The fourth column “Action by Monitor,” outlines the steps for monitoring the action identified in the mitigation measure.
 - f. The fifth column entitled “Monitoring Timing,” states the time the monitor must ensure that the mitigation measure has been implemented.
 - g. The last column will be used by the District to ensure that individual mitigation measures have been monitored.

Table 1: Mitigation Monitoring and Reporting Program for Contra Costa College

Recommended Mitigation Measures	Action and Implementation Timing	Party Responsible for Implementing Mitigation	Party Responsible for Monitoring	Action by Monitor	Monitoring Timing	Verification of Compliance Name/Date
III. AIR QUALITY						
<p>AIR-1: Consistent with guidance from the BAAQMD, the District shall require contractors to include emissions control measures in construction specifications for the project. The District shall review the final construction specifications to verify that the requirements have been included prior to beginning grading and excavating activities for the project. The District shall verify via field inspection at least twice during construction that the measures are being implemented. The following actions are required:</p> <ul style="list-style-type: none"> • Idling time of diesel powered construction equipment shall be limited to 2 minutes; • Alternative powered construction equipment (i.e., CNG, biodiesel, electric) shall be utilized when feasible; • Add-on control devices shall be used such as diesel oxidation catalysts or particulate filters; • Project construction shall be phased; and • Operating hours of heavy duty equipment shall be minimized. 	Implement the emission control measures listed in Mitigation Measure AIR-1 during construction	Contra Costa Community College District and construction contractor	Contra Costa Community College District	<p>1. Review final construction specifications to ensure all requirements listed in Mitigation Measure AIR-1 are included</p> <p>2. Visit project site at least twice to verify that emission control measures are being implemented</p>	<p>1. Before grading begins</p> <p>2. During project construction</p>	<p><i>Name:</i></p> <p><i>Date:</i></p>

Recommended Mitigation Measures	Action and Implementation Timing	Party Responsible for Implementing Mitigation	Party Responsible for Monitoring	Action by Monitor	Monitoring Timing	Verification of Compliance Name/Date
<p>AIR-2: AIR-2: Consistent with the guidance from the BAAQMD, the District shall include dust control measures in construction contracts and specifications for the project. The District shall verify via field inspection at least twice during construction of each project that the measures are being implemented.</p> <p>The following controls shall be implemented at all construction sites:</p> <ul style="list-style-type: none"> • Water all active construction areas at least twice daily and more often during windy periods; active areas adjacent to existing land uses shall be kept damp at all times, or shall be treated with non-toxic stabilizers to control dust; • Cover all trucks hauling soil, land, and other loose materials or require all trucks to maintain at least two feet of freeboard; • Pave, apply water three times daily, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas, inactive construction areas, and staging areas at construction sites; • Sweep daily (with water sweepers) all paved access roads, parking areas and staging areas at construction sites; water sweepers shall vacuum up excess water to avoid runoff-related impacts to water quality; • Sweep streets daily (with water sweepers) if visible soil material is carried onto adjacent public streets; 	<p>Implement the dust control measures listed in Mitigation Measure AIR-2 during construction</p>	<p>Contra Costa Community College District and construction contractor</p>	<p>Contra Costa Community College District</p>	<p>1. Review final construction specifications to ensure all requirements listed in Mitigation Measure AIR-2 are included</p> <p>2. Visit project site at least twice to verify that dust control measures are being implemented</p>	<p>1. Before grading begins</p> <p>2. During project construction</p>	<p>Name:</p> <p>Date:</p>

Recommended Mitigation Measures	Action and Implementation Timing	Party Responsible for Implementing Mitigation	Party Responsible for Monitoring	Action by Monitor	Monitoring Timing	Verification of Compliance Name/Date
<p>AIR-2 <i>Continued</i></p> <ul style="list-style-type: none"> • Enclose, cover, water twice daily, or apply non-toxic soil binders to exposed stockpiles (dirt, sand, etc.); • Install base rock at entryways for all existing trucks, and wash off the tires or tracks of all trucks and equipment in designated areas before leaving the site; • Limit traffic speeds on unpaved roads to 15 mph; • Install sandbags or other erosion control measures to prevent silt runoff to public roadways; • Replant vegetation in disturbed areas as quickly as possible; and • Suspend excavation and grading activity when sustained wind speeds exceed 25 mph. Sustained wind speed shall be determined by averaging observed values over a two- minute period. Wind monitoring by the construction manager shall be required at all times during excavation and grading activities. 						
AIR-3a: Implement Mitigation Measure AIR-1.	See Mitigation Measure AIR-1					
AIR-3b: Implement Mitigation Measure AIR-2.	See Mitigation Measure AIR-2					

Recommended Mitigation Measures	Action and Implementation Timing	Party Responsible for Implementing Mitigation	Party Responsible for Monitoring	Action by Monitor	Monitoring Timing	Verification of Compliance Name/Date
IV. BIOLOGICAL RESOURCES						
<p>BIO-1: Prior to construction, the District shall prepare and submit a Notification of Lake or Streambed Alteration application package (Form FG2023) to the California Department of Fish and Game (CDFG) for working within the riparian corridor of the Rheem Creek tributary. The application shall include a Riparian Restoration Plan prepared by a qualified restoration ecologist for any vegetation removal within the riparian corridor. This plan shall be reviewed and approved by the District. The amount of riparian vegetation trimmed, removed, or disturbed shall be kept to a minimum.</p>	<p>Submit a Notification of Lake or Streambed Alteration application package prior to construction of bridges</p>	<p>Contra Costa Community College District</p>	<p>Contra Costa Community College District</p>	<p>Verify that Notification of Lake or Streambed Alteration application package is submitted to California Department of Fish and Game</p>	<p>Prior to construction</p>	<p>Name: Date:</p>
<p>BIO-2a: To determine the extent of Corps jurisdiction at the proposed bridge locations, a qualified wetland scientist shall delineate waters of the U.S. in areas where bridges would be constructed using Corps methodology. The delineation shall be verified by the Corps.</p>	<p>Delineate waters of the U.S. in areas where bridges would be constructed using Corps methodology prior to construction of bridges</p>	<p>Contra Costa Community College District</p>	<p>Contra Costa Community College District</p>	<p>Submit the delineation to the Corps for verification</p>	<p>Prior to construction</p>	<p>Name: Date:</p>
<p>BIO-2 Continued BIO-2b: The District shall obtain the appropriate federal and State permits for any construction activities and/or structures located below the OHWM of Rheem Creek and/or its tributary. Assuming that the total area impacted would be less than 0.5 acre (21,780 square feet), construction of the pedestrian bridges would likely qualify for authorization under Nationwide Permit (NWP) 14 (Linear Transportation Projects), which regulates “activities required for the construction, expansion, modification, or improvement of linear transportation crossings (e.g., roads, highways, railways, trails, airport runways, and taxiways) in waters of the U.S...”</p>	<p>Obtain the appropriate federal and State permits for any construction activities located below OHWM of Rheem Creek prior to construction</p>	<p>Contra Costa Community College District</p>	<p>Contra Costa Community College District</p>	<p>Verify that appropriate federal and State permits are received</p>	<p>Prior to construction</p>	<p>Name: Date:</p>

Recommended Mitigation Measures	Action and Implementation Timing	Party Responsible for Implementing Mitigation	Party Responsible for Monitoring	Action by Monitor	Monitoring Timing	Verification of Compliance Name/Date
<p>BIO-3: If feasible, all vegetation removal shall be conducted during the non-breeding season (i.e., August 1 to February 28) to avoid direct impacts to nesting birds. If such work is scheduled during the breeding season, a qualified ornithologist shall conduct a pre-construction survey to determine if any birds are nesting in the vegetation to be removed. The pre-construction survey shall be conducted within 15 days prior to the start of work from March through May (since there is higher potential for birds to</p>	<p>Restrict vegetation removal activities to the period from August 1 to February 28. If not possible, have a qualified ornithologist create a buffer around nests in which no work shall be allowed until the young have successfully fledged prior to construction</p>	<p>Contra Costa Community College District</p>	<p>Contra Costa Community College District</p>	<p>Verify that construction is not taking place during breeding season, or ensure a proper buffer is created for nesting birds</p>	<p>Prior to construction</p>	<p>Name: Date:</p>
<p>BIO-3<i>Continued</i> initiate nesting during this period), and within 30 days prior to the start of work from June through July. If active nests are found during the survey, the biologist shall determine an appropriately sized buffer around the nest in which no work shall be allowed until the young have successfully fledged. The size of the nest buffer shall be determined by the biologist in consultation with the CDFG, and shall be based on the nesting species, its sensitivity to disturbance, and the expected types of disturbance.</p>						
<p>V. CULTURAL RESOURCES</p>						

Recommended Mitigation Measures	Action and Implementation Timing	Party Responsible for Implementing Mitigation	Party Responsible for Monitoring	Action by Monitor	Monitoring Timing	Verification of Compliance Name/Date
<p>CULT-1: The Contra Costa Community College District shall inform its contractor(s) of the sensitivity of the project area for archaeological resources by including the following directive in contract documents: “If prehistoric or historical archaeological deposits are discovered during project activities, all work within 25 feet of the discovery shall be redirected and a qualified archaeologist contacted to assess the situation, consult with agencies as appropriate, and make recommendations regarding the treatment of the</p>	<p>1. Include the directive described in Mitigation Measure CULT-1 in contract documents</p> <p>2. Evaluate any archaeological resources discovered during project construction as described in CULT-1 and submit report of findings to the District and the NWIC</p>	<p>1. Contra Costa Community College District</p> <p>2. Construction contractor</p>	<p>1. Contra Costa Community College District</p> <p>2. Contra Costa Community College District</p>	<p>1. Verify that the appropriate language has been incorporated in contract documents</p> <p>2. Visit project site and verify that measures are being implemented and that any reports are submitted to the NWIC</p>	<p>1. Before grading begins</p> <p>2. During project construction</p>	<p>Name:</p> <p>Date:</p>
<p><i>CULT-1 Continued</i></p> <p>discovery. Project personnel should not collect or move any archaeological materials or human remains and associated materials. Archaeological resources can include flaked-stone tools (e.g., projectile points, knives, choppers) or obsidian, chert, basalt, or quartzite toolmaking debris; bone tools; culturally darkened soil (i.e., midden soil often containing heat-affected rock, ash and charcoal, shellfish remains, faunal bones, and cultural materials); and stone-milling equipment (e.g., mortars, pestles, handstones). Prehistoric archaeological sites often contain human remains. Historical materials can include wood, stone, concrete, or adobe footings, walls, and other structural remains; debris-filled wells or privies; and deposits of wood, glass, ceramics, metal, and other refuse.”</p> <p>The Contra Costa Community College District shall verify that the language has been included in the contract documents.</p>						

Recommended Mitigation Measures	Action and Implementation Timing	Party Responsible for Implementing Mitigation	Party Responsible for Monitoring	Action by Monitor	Monitoring Timing	Verification of Compliance Name/Date
<p>CULT-1 <i>Continued</i></p> <p>Adverse effects to archaeological deposits should be avoided by project activities. If such deposits cannot be avoided, they shall be evaluated for their California Register of Historical Resources eligibility to determine if such deposits qualify as "historical resources" under CEQA (CCR Section 15064.5(c)(1)). If the deposit is not eligible, a determination shall be made as to whether it qualifies as a "unique archaeological resource" under CEQA. If the deposit is neither a historical nor unique archaeological resource, avoidance is not necessary. If the deposit is eligible to the California Register, or is a unique archaeological resource, it will need to be avoided by adverse effects or such effects must be mitigated. Mitigation may consist of, but is not necessarily limited to, systematic recovery and analysis of archaeological deposits; recording the resource; preparation of a report of findings; and accessioning recovered archaeological materials at an appropriate curation facility. Public educational outreach may also be appropriate. Upon completion of the assessment, the archaeologist shall prepare a report documenting the assessment methods and results, and provide recommendations for the treatment of the archaeological materials discovered. The report shall be submitted to the Contra Costa Community College District and the Northwest Information Center.</p>						

Recommended Mitigation Measures	Action and Implementation Timing	Party Responsible for Implementing Mitigation	Party Responsible for Monitoring	Action by Monitor	Monitoring Timing	Verification of Compliance Name/Date
<p>CULT-2: A qualified paleontologist shall monitor initial project ground-disturbing activities. The paleontologist can then determine whether further monitoring, periodic site reviews, or no further monitoring is appropriate. Paleontological monitoring shall include inspection of mechanically exposed, paleontologically sensitive geological formations underlying the project site. Samples of matrix shall be collected for processing, sorting, and microscopic examination to determine if microfossils are present within exposed geological formations.</p> <p>If paleontological resources are discovered during project activities, all work within 25 feet of the discovery shall be redirected until the paleontological monitor has assessed the situation and made recommendations regarding their treatment. It is recommended that adverse effects to paleontological resources be avoided by project activities. If avoidance is not feasible, the paleontological resources shall be evaluated for their significance.</p> <p>Paleontological resources are considered significant if they possess the possibility of providing new information regarding past life forms, paleoecology, stratigraphy, and geological formation processes. If the resources are not significant, avoidance is not necessary. If the resources are significant, they must be avoided by adverse effects, or such effects must be mitigated. Mitigation may include monitoring, recording the fossil locality, data recovery and analysis, a technical data recovery report, and accessioning the fossil material and technical report to a paleontological repository. Public educational outreach may also be appropriate.</p>	<ol style="list-style-type: none"> 1. Have a paleontologist monitor project ground-disturbing activities prior to construction 2. Evaluate any paleontological resources discovered during project construction as described in CULT-2 and submit report of findings to the District and a paleontological repository 	<ol style="list-style-type: none"> 1. Contra Costa Community College District 2. Construction contractor 	<ol style="list-style-type: none"> 1. Contra Costa Community College District 2. Contra Costa Community College District 	<ol style="list-style-type: none"> 1. Verify that the appropriate language has been incorporated in contract documents 2. Visit project site and verify that measures are being implemented and that any reports are submitted to a paleontological repository 	<ol style="list-style-type: none"> 1. Before grading begins 2. During project construction 	<p>Name:</p> <p>Date:</p>

Recommended Mitigation Measures	Action and Implementation Timing	Party Responsible for Implementing Mitigation	Party Responsible for Monitoring	Action by Monitor	Monitoring Timing	Verification of Compliance Name/Date
<p><i>CULT-2 Continued</i></p> <p>Upon completion of the paleontological monitoring, a report of findings with an appended, itemized inventory of specimens—as appropriate—should be prepared and submitted to an appropriate repository, such as the University of California Museum of Paleontology.</p>						
<p>CULT-3: If human remains are encountered, these remains shall be treated in accordance with Health and Safety Code Section 7050.5. The Contra Costa College District shall inform its contractor(s) of the cultural sensitivity of the project area for human remains by including the following directive in contract documents: “If human remains are encountered during project activities, work within 25 feet of the discovery shall be redirected and the County Coroner notified immediately. At the same time, an archaeologist shall be contacted to assess the situation and consult with agencies as appropriate. Project personnel shall not collect or move any human remains and associated materials. If the human remains are of Native American origin, the Coroner must notify the Native American Heritage Commission within 24 hours of this identification. The Native American Heritage Commission will identify a Most Likely Descendant to inspect the site and provide recommendations for the proper treatment of the remains and associated grave goods.”</p>	<p>1. Include the directive described in Mitigation Measure CULT-3 in contract documents</p> <p>2. Stop work within 25 feet of human remains discovered during project construction; prepare and submit report of findings to the District and NWIC.</p>	<p>1. Contra Costa Community College District</p> <p>2. Construction contractor</p>	<p>1. Contra Costa Community College District</p> <p>2. Contra Costa Community College District</p>	<p>1. Verify that the appropriate language has been incorporated in contract documents</p> <p>2. Visit project site and verify that measures are being implemented and that any reports are submitted to NWIC</p>	<p>1. Before grading begins</p> <p>2. During project construction</p>	<p><i>Name:</i></p> <p><i>Date:</i></p>

Recommended Mitigation Measures	Action and Implementation Timing	Party Responsible for Implementing Mitigation	Party Responsible for Monitoring	Action by Monitor	Monitoring Timing	Verification of Compliance Name/Date
<p><i>CULT-3 Continued</i> The Contra Costa Community College District shall verify that the language has been included in the contract documents. Upon completion of the assessment, the archaeologist shall prepare a report documenting the methods and results, and provide recommendations for the treatment of the human remains and any associated cultural materials, as appropriate and in coordination with the recommendations of the MLD. The report shall be submitted to the Contra Costa Community College District and the Northwest Information Center.</p>						
VI. GEOLOGY AND SOILS						
<p>GEO-1a: Prior to construction, a subsurface fault investigation shall be performed by a Certified Engineering Geologist or Geotechnical Engineer to identify potentially active fault traces within the footprint of proposed structures intended for human occupancy and 50 feet beyond. All future structures used or intended for supporting or sheltering humans for more than 2,000 person-hours per year shall be setback at least 50 feet from active faults, unless it is proven that there are no active branches of that fault in accordance with Section 3603 (d) of Appendix B of Special Report 42. In no case shall a structure for human habitation be constructed so as to cross the trace of an active fault. CCCCDC Facilities staff and the Division of the State Architect (DSA) shall review the findings and recommendations of the subsurface fault investigation and verify that the project design has implemented appropriate setbacks from faults based on those findings prior to DSA project approval.</p>	Complete a subsurface fault investigation prior to construction	Contra Costa Community College District	Contra Costa Community College District	Verify that subsurface fault investigation is completed	Prior to construction	<i>Name:</i> <i>Date:</i>

Recommended Mitigation Measures	Action and Implementation Timing	Party Responsible for Implementing Mitigation	Party Responsible for Monitoring	Action by Monitor	Monitoring Timing	Verification of Compliance Name/Date
<p>GEO-1b: The design of project improvements, including sidewalks, parking lots, and subsurface utilities, shall consider the potentially active and active fault traces and incorporate measures to ensure that potential damage due to rupture is minimized; utility (electricity, natural gas, telecommunications, water, sewer) crossings at potentially active and active fault traces shall be engineered with flexible connections or an equally effective alternate engineered solution so as to minimize damage from seismic activity and in accordance with the recommendations of subsection F of Appendix C of Special Publication 42. CCCC Facilities staff and the DSA shall review and approve the design of project improvements and utilities prior to DSA project approval.</p>	<p>Consider the potentially active and active fault traces and incorporate measures to ensure damage due to rupture is minimized prior to construction</p>	<p>Contra Costa Community College District</p>	<p>Contra Costa Community College District</p>	<p>Verify with DSA that design measures minimize potential damage from rupture</p>	<p>Prior to construction</p>	<p><i>Name:</i> <i>Date:</i></p>
<p>GEO-2: Prior to construction, a geotechnical investigation shall be performed by a Certified Engineering Geologist or Geotechnical Engineer to identify potential liquefiable sediments southwest of and adjacent to Rheem Creek. If liquefiable sediments are identified at the project site, the District shall implement appropriate grading, drainage, and foundation design elements recommended by a Certified Engineering Geologist or Geotechnical Engineer and approved by the DSA to reduce the potential impact from liquefaction.</p>	<p>Perform a geotechnical investigation to identify potential liquefiable sediments by Rheem Creek</p>	<p>Contra Costa Community College District</p>	<p>Contra Costa Community College District</p>	<p>Verify that geotechnical investigation is completed</p>	<p>Prior to construction</p>	<p><i>Name:</i> <i>Date:</i></p>

Recommended Mitigation Measures	Action and Implementation Timing	Party Responsible for Implementing Mitigation	Party Responsible for Monitoring	Action by Monitor	Monitoring Timing	Verification of Compliance Name/Date
<p>GEO-3: A geotechnical investigation shall be performed by a Certified Engineering Geologist or Geotechnical Engineer to evaluate slope stability along the hillside portion of the project side. If slopes susceptible to seismic failure are identified at the project site, the District shall implement appropriate slope grading, drainage, and reinforcements as recommended by a Certified Engineering Geologist or Geotechnical Engineer and approved by the DSA to reduce the potential impact from slope failure.</p>	<p>Perform a geotechnical investigation to evaluate slope stability along the hillside portion of the project site</p>	<p>Contra Costa Community College District</p>	<p>Contra Costa Community College District</p>	<p>Verify that geotechnical investigation is completed</p>	<p>Prior to construction</p>	<p>Name: Date:</p>
<p>GEO-4: Implement Mitigation Measure HYD-1.</p>	<p>See Mitigation Measure HYD-1.</p>					
<p>GEO-5: Prior to construction, a geotechnical investigation shall be performed by a Certified Engineering Geologist or Geotechnical Engineer and the resulting report shall include evaluation of dynamic compaction potential at the project site. If soils susceptible to dynamic compaction are present the project site, the District shall implement proper grading and compaction measures as recommended in the final report and approved by the DSA to reduce the potential impacts from dynamic compaction to a less-than-significant level.</p>	<p>Perform a geotechnical investigation to identify the dynamic compaction potential at the project site</p>	<p>Contra Costa Community College District</p>	<p>Contra Costa Community College District</p>	<p>Verify that geotechnical investigation was completed</p>	<p>Prior to construction</p>	<p>Name: Date:</p>
<p>GEO-6a: The District shall incorporate all recommendations of a final site-specific design-level geotechnical investigation as prepared by a Certified Engineering Geologist or Geotechnical Engineer into all development plans submitted for the project, including recommendations for grading, placement of fill materials, pretreatment of expansive soils, and avoidance of settlement and/or differential settlement of infrastructure and buildings.</p>	<p>Incorporate recommendations from geotechnical investigations into development plans</p>	<p>Contra Costa Community College District</p>	<p>Contra Costa Community College District</p>	<p>Verify that recommendations from geotechnical investigations are incorporated into all development plans</p>	<p>Prior to construction</p>	<p>Name: Date:</p>

Recommended Mitigation Measures	Action and Implementation Timing	Party Responsible for Implementing Mitigation	Party Responsible for Monitoring	Action by Monitor	Monitoring Timing	Verification of Compliance Name/Date
<p>GEO-6b: The District shall incorporate all recommendations of a final site-specific design-level geotechnical investigation as prepared by a Certified Engineering Geologist or Geotechnical Engineer into all development plans submitted for the project, including recommendations to protect iron, steel, metal and concrete from deterioration caused by contact with corrosive soils.</p>	<p>Incorporate recommendations from geotechnical investigations into development plans</p>	<p>Contra Costa Community College District</p>	<p>Contra Costa Community College District</p>	<p>Verify that recommendations from geotechnical investigations are incorporated into all development plans</p>	<p>Prior to construction</p>	<p><i>Name:</i> <i>Date:</i></p>
<p>VII. HAZARDS AND HAZARDOUS MATERIALS</p>						
<p>HAZ-1a: Prior to demolition of structures on the site, a comprehensive lead-based paint survey shall be conducted. If any lead-based paint is identified, it shall be removed from the site in accordance with all applicable regulations, including Occupational Safety and Health Administration (OSHA) guidelines. The District shall verify that the survey has been conducted before beginning demolition of the buildings.</p>	<p>Complete a lead-based paint survey as described in Mitigation Measure HAZ-1a</p>	<p>Contra Costa Community College District</p>	<p>Contra Costa Community College District</p>	<p>Verify that the survey has been conducted</p>	<p>Before demolition begins</p>	<p><i>Name:</i> <i>Date:</i></p>
<p>HAZ-1b: Prior to demolition of structures on the site, a complete Asbestos Hazard Emergency Response Act-Level Pre-Demolition Asbestos Survey shall be conducted. If asbestos is identified, a licensed asbestos abatement contractor shall be retained to abate identified asbestos-containing material in accordance with all applicable regulations. The District shall verify that the survey has been conducted before beginning demolition of the buildings.</p>	<p>Complete an asbestos survey as described in Mitigation Measure HAZ-1b</p>	<p>Contra Costa Community College District</p>	<p>Contra Costa Community College District</p>	<p>Verify that the survey has been conducted</p>	<p>Before demolition begins</p>	<p><i>Name:</i> <i>Date:</i></p>

Recommended Mitigation Measures	Action and Implementation Timing	Party Responsible for Implementing Mitigation	Party Responsible for Monitoring	Action by Monitor	Monitoring Timing	Verification of Compliance Name/Date
VIII. HYDROLOGY AND WATER QUALITY						
<p>HYD-1: As a condition of approval of the project plans, the District shall prepare a Storm Water Pollution Prevention Plan (SWPPP) designed to reduce potential impacts to surface water quality through the construction and operational periods of the project including all on- and off-site improvements. The SWPPP shall be submitted for approval to the Facilities Division of the CCCC and Division of the State Architect prior to issuance of project approvals. The SWPPP shall be maintained on-site and made available to Water Board staff upon request. The SWPPP shall include specific and detailed BMPs designed to mitigate construction-related and operational period pollutants.</p> <p><i>Construction Period:</i> At a minimum, BMPs shall include practices to minimize the contact of construction materials, equipment, and maintenance supplies (e.g., fuels, lubricants, paints, solvents, adhesives) with stormwater. The SWPPP shall specify properly designed centralized storage areas that keep these materials out of the rain.</p> <p>An important component of the stormwater quality protection effort is the knowledge of the site supervisors and workers. To educate on-site personnel and maintain awareness of the importance of stormwater quality protection, site supervisors shall conduct regular tailgate meetings to discuss pollution prevention. The frequency of the meetings and required personnel attendance list shall be specified in the SWPPP.</p>	<p>Facilities Division of the District shall prepare and the Division of the State Architect shall approve a SWPPP that includes requirements listed in HYD-1</p>	<p>Contra Costa Community College District</p>	<p>Contra Costa Community College District</p>	<p>Verify that the SWPPP has been prepared</p>	<p>Before construction begins</p>	<p>Name: Date:</p>

Recommended Mitigation Measures	Action and Implementation Timing	Party Responsible for Implementing Mitigation	Party Responsible for Monitoring	Action by Monitor	Monitoring Timing	Verification of Compliance Name/Date
<p>HYD-1 <i>Continued</i></p> <p>The SWPPP shall include operational-period BMPs that would result in treatment of an appropriate percentage of the runoff from the project including all on- and off-site improvements. The SWPPP shall include as many LID BMPs as feasible. CCCC Facilities staff and the Division of the State Architect shall review and approve the SWPPP, including operational period BMPs, prior to approval of the project plans.</p>						
<p>HYD-2: Implement Mitigation Measure HYD-1.</p>	See Mitigation Measure HYD-1.					
<p>HYD-3: During design development and prior to construction of the bridges, a qualified engineering professional shall design the foundations and support structures for the proposed prefabricated pedestrian bridge(s) in such a way as to span the creek(s) from outside the 'top-of-bank' points of the stream banks, or:</p> <p>A Location Hydraulic Study (LHS) shall be prepared showing that any appurtenance structures required for the bridges will not exacerbate flooding up or downstream of the project site, result in bank or bottom scour, or accelerate bank erosion and result in degradation of water quality from creek damage.</p>	Prepare a Location Hydraulic Study during project design	Contra Costa Community College District	Contra Costa Community College District	Verify that the Location Hydraulic Study has been prepared and the results considered in the project design	Before construction begins	<p><i>Name:</i></p> <p><i>Date:</i></p>
<p>HYD-4: Implement Mitigation Measure HYD-1.</p>	See Mitigation Measure HYD-1.					

Recommended Mitigation Measures	Action and Implementation Timing	Party Responsible for Implementing Mitigation	Party Responsible for Monitoring	Action by Monitor	Monitoring Timing	Verification of Compliance Name/Date
XI. NOISE						
<p>NOISE-1: The project shall implement the following noise reduction measures:</p> <ul style="list-style-type: none"> • The District shall coordinate with the CCC campus administration and the construction contractor to schedule loud construction activities to less sensitive time periods. • All heavy construction equipment used on the project site shall be maintained in good operating condition, with all internal combustion, engine-driven equipment fitted with intake and exhaust mufflers that are in good condition. 	Implement the noise-reducing measures described in Mitigation Measure NOISE-1	Construction contractor	Contra Costa Community College District	Visit project site and verify that noise control measures are being implemented	During project construction	<i>Name:</i> <i>Date:</i>
NOISE-2: Implement Mitigation Measure NOISE-1.	See Mitigation Measure NOISE-1.					

PART 2 – PRODUCTS - Not Used.

PART 3 – EXECUTION - Not Used.

END OF SECTION 01415

SECTION 01416
SPECIAL PROCEDURES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. All Contract Documents shall be reviewed for applicable provisions related to the provisions in this document, and provisions in the General Conditions and other Division 1 Specification Sections shall apply to this Section without limitation.

1.2 SUMMARY

- A. In Compliance with CEQA requirements, the District conducted an Initial Study to ascertain if the project may have an effect on the environment. The Initial Study identified potential impacts on the environment. However, all potential impacts of the proposed Project can be avoided or reduced to a less-than-significant level by implementation of the following mitigation measures. Contractor shall conform with the following mitigation measures, including but not limited to, the following:
 - 1. Noise Control
 - 2. Dust Control
 - 3. Traffic Control
 - 4. Spill Prevention, Control and Countermeasures
 - 5. Tree Protection
 - 6. Migratory Bird Protection
 - 7. Cultural Resources Protection
- B. In no case shall the restrictions identified in this Section limit the Contractor's responsibility for compliance with all Federal, state, and local safety ordinances and regulations.

1.3 NOISE CONTROL

- A. The intent of this Section is to minimize construction noise within construction areas, lay-down areas, and communities adjacent to the construction site. To this end, the Contractor and all subcontractors, suppliers, and vendors, are required to comply with all applicable noise regulations, specification requirements, and the noise level limits specified herein.
- B. The Contractor shall use equipment with efficient noise-suppression devices and employ other noise abatement measures such as enclosures and barriers necessary for the protection of the public, as necessary.
- C. The Contractor shall schedule and conduct operations in a manner that will minimize, to the greatest extent feasible, the disturbance to the public in areas adjacent to the Work and to occupants of buildings in the vicinity of the Work.
- D. Noise Control Measures. Contractor shall implement the following noise-control measures to reduce and control noise generated from construction, demolition, and construction related activities:
 - 1. Restrict noise-producing construction activities to between 7:00 a.m. and 7:00 p.m. on weekdays. If construction is scheduled for Saturdays or Sundays to avoid disrupting college operations, restrict noise-producing construction activities to between 9:00 a.m.

and 5:00 p.m. Construction on Sundays shall be avoided, if possible, and there will be no construction on public holidays without prior written request submitted to and written approval returned by the District, at its sole discretion. A decision by the District to deny Sunday or holiday work shall not be deemed to cause a delay in the Contract Time. When activities must occur outside the hours specified above, conform with notification requirements of this Section and utilize local barriers around equipment and other noise attenuating devices if necessary to limit noise to acceptable levels.

2. Comply with all City of San Pablo requirements regarding both allowable hours of Work and noise level limitations.
 3. All construction equipment shall have appropriate mufflers, intake silencers, and other required noise-control features, shall be properly maintained and in compliance with State standards.
 4. Vehicles and other gas or diesel-powered equipment shall be prohibited from unnecessary warming up, idling, and engine revving.
 5. Impact tools shall utilize "quiet technology" to minimize noise.
- E. Secure written permission from Construction Manager at least three (3) working days prior to using noisy and vibratory equipment, such as jackhammers, concrete saws, impact tools, and high frequency electrical equipment. Cooperate with District if the use of noisy equipment becomes objectionable to college employees and/or students
- F. The work must be conducted so that nearby residents and college operations in surrounding facilities and classrooms will not be disturbed at any time during any phase of the Work including, but not limited to, the following requirements:
1. Do not use loud vocal or mechanical signals. Use of outside speakers, loud radios and similar devices are prohibited.
 2. Work shall be performed in a manner to prevent nuisance conditions such as noise which exhibits a specific audible frequency or tone (e.g., backup alarms, poorly maintained equipment, brake squeal, etc.) or impact noise (e.g., jackhammers, hoe rams). The District will make any final interpretation concerning whether or not nuisance noise conditions exist. Only the District representatives and specifically designated College representatives have the authority to stop the Work until nuisance noise conditions are resolved, without additional Contract Time or compensation for the Contractor.

1.4 DUST CONTROL

- A. Contractor shall implement dust control measures to protect air quality during construction to control dust emissions generated during construction, implement the following Bay Area Air Quality Management District (BAAQMD) measures for construction emissions of particulate matter over 10 microns in size (PM10).

1.5 TRAFFIC CONTROL

- A. Contractor shall implement traffic control to minimize the effects of construction traffic on the campus and surrounding residential areas, as appropriate.
- B. Contractor shall notify the District, Designer, Construction Manager, Project Inspector, Campus Police Department, city and county agencies, as applicable, a minimum of two (2) working days in advance of performing work which necessitates closing or interfering with traffic on public

thoroughfares, parking areas, driveways and walks. Obtain written permission prior to effecting such closures and interruptions. **All see Section 01140, Work Restrictions, for this project.**

1.6 SPILL PREVENTION, CONTROL AND COUNTERMEASURES

- A. Contractor shall implement Spill Prevention, Control and Countermeasures to minimize the potential for and effects from spills of hazardous, toxic or petroleum substances during construction and demolition activities.
- B. The federal reportable spill quantity for petroleum products, as defined in 40 CFR 110, is any oil spill that includes any of the following:
 - 1. Violates applicable water quality standards.
 - 2. Causes a film or sheen on or discoloration of the water surface or adjoining shoreline.
 - 3. Causes a sludge or emulsion to be deposited beneath the surface of the water or adjoining shorelines.
- C. If a spill is reportable, notify the District's Representative and take action to contact appropriate safety and clean-up crews.
 - 1. A written description of reportable releases must be submitted to the District's Representative and to the San Francisco Bay Regional Water Quality Control Board (RWQCB). This submittal must contain a description of the spill, including the type of material and an estimate of the amount spilled, the date of the release, an explanation of why the spill occurred and a description of the steps taken to prevent and control future releases. Document the releases on a spill report form.
 - 2. If a reportable spill has occurred and results determine that project activities have adversely affected surface water or groundwater quality, the District will engage a registered environmental assessor at Contractor's expense for a detailed analysis to identify the likely cause of contamination. This analysis will conform to American Society for Testing and Materials (ASTM) standards and will include recommendations for reducing or eliminating the source or mechanisms of contamination.
 - 3. Based on this analysis, the Contractor shall select and implement measures to control contamination, with a performance standard that groundwater quality must be returned to baseline conditions. These measures will be subject to approval by the District.

1.7 TREE PROTECTION

- A. Definitions:
 - 1. Dripline: If applicable, the area on the ground from the trunk of any tree to the point directly below the outermost tips of the foliage of that tree.
 - 2. Root Protection Zone ("RPZ"): If applicable, the areas enclosed with tree protection fencing as designated on the drawing(s).
 - 3. Tree damage: If applicable, tree damage shall include, but not limited to, the following: Significant injury to the root system or other parts of a tree including burning, application of toxic substances, damaging through contact with equipment or machinery, changing the natural grade within the Dripline or RPZ, compacting the soil within the Dripline or RPZ, interfering with the normal water requirements of the tree, unauthorized trenching

or excavating within the Dripline or RPZ, or unauthorized removal of more than 1/3 of the live wood, foliage or roots.

- B. Root Protection: No storage of materials or equipment will be allowed within the Dripline. Whenever possible, excavation shall be on a radial line, diverging from the tree trunk. For items of Work delayed materially beyond Date of Substantial Completion, provide update submittal within 14 Days after acceptance, listing date of acceptance as start of warranty period.
- C. Exposure to harmful substances: No storage or dumping of any substances that may be harmful to trees shall occur at any location on the Site.
- D. Where construction is to be performed in the vicinity of trees and shrubbery, the Work shall be carried on in a manner that will cause minimum damage. District will designate trees that are to be removed. Under no circumstances are additional trees to be removed without written permission from District. Trees and shrubbery that are not to be removed shall be protected from injury or damage resulting from Contractor's operations.
- E. Any tree that is removed without District's permission or is irreparably damaged, in the opinion of District, shall cost Contractor in damages [\$100.00] per square inch of cross section, measured at 4 ½ feet above ground, but not less than [\$250.00], such cost to be deducted from monies due or to become due under the Contract. If tree protection is not performed or is not performed adequately and District determines that a tree has been irreparably damaged, Contractor shall pay the same amount of damages as for unauthorized removal of a tree. Contractor shall immediately report all tree damage to District, so that District may determine applicable damages.

1.8 MIGRATORY BIRD PROTECTION

- A. If applicable, conduct vegetation and tree removal outside of the migratory bird nesting season. The typical nesting season for migratory birds in this part of **California is March 1st through July 31.**
- B. If vegetation and tree removal must take place during the nesting season, these activities shall be preceded by a survey for nesting migratory birds by the District's qualified ornithologist. If bird nests are discovered in the trees or on the buildings, they shall not be removed while the nest(s) are active.

1.9 CULTURAL RESOURCES PROTECTION

- A. If buried cultural resources, such as chipped or ground stone, historic debris, building foundations or human bones or paleontological resources are discovered inadvertently during ground-disturbing activities, Contractor shall avoid any further disturbance of the materials and immediately discontinue earthwork within 100 feet of the find. Contractor shall notify District's Representative immediately upon encountering cultural resources. Contractor shall be prepared to move on to another location or phase of work, allowing sufficient time for District's Representative to evaluate the nature and significance of the find and implement appropriate management procedures.
- B. In the event that prehistoric human remains are encountered, further excavation or disturbance of the site shall cease immediately, pursuant to Health and Safety Code 7050.5. Contractor shall notify District's Representative immediately upon encountering human remains. Contractor shall move on to another location or phase of Work to allow proper assessment of the situation.

- C. If human remains of Native American origin are discovered during project construction, it will be necessary to comply with State laws relating to the disposition of Native American burials, which fall under the jurisdiction of the NAHC (Public Resources Code (PRC) Section 5097. Consequently, if any human remains are discovered or recognized in any location other than a dedicated cemetery, there will be no further excavation or disturbance of the site or any nearby areas reasonably suspected to overlie adjacent human remains:
1. Until the Contra Costa County Coroner has been informed and has determined that no investigation of the cause of death is required;
 2. If the remains are of Native American origin;
 - a. The descendants of the deceased Native American(s) have made a recommendation to the landowner or the person responsible for the excavation work regarding means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in PRC Section 5097.98 or
 - b. The NAHC has been unable to identify a descendent or the descendent failed to make a recommendation within 24 hours after being notified by the NAHC.

PART 2 – PRODUCTS - Not Used.

PART 3 – EXECUTION - Not Used.

END OF SECTION 01416

SECTION 01500

TEMPORARY FACILITIES AND CONTROLS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. All Contract Documents shall be reviewed for applicable provisions related to the provisions in this document, and provisions in the General Conditions and other Specification Sections shall apply to this section without limitation.

1.2 REQUIRED TEMPORARY FACILITIES AND CONTROLS

- A. Contractor shall provide and maintain all temporary facilities, utilities, and controls as required to perform the Work and as required herein. Materials, installation, and maintenance of temporary utilities and facilities shall comply with all applicable local and State regulatory requirements. Remove temporary utilities and facilities, including associated materials and equipment, when no longer required. Restore and recondition existing facilities used during construction and areas of the Site, roads, driveways, parking lots, landscaping, and any other existing improvements either damaged or disturbed by the installation of temporary facilities or utilities to their original condition. Remove and properly dispose of debris resulting from removal and reconditioning operations.

- B. Contractor shall furnish and install requirements for temporary utilities, facilities, security, and protection, which include but are not limited to the following:

1. Temporary Electric Power and Lighting

- a. The District will make available existing electric power sources in its distribution system to facilitate the Contractor's completion of the Work. However, the installation and removal of all temporary distributions of power to these existing facilities throughout the Site shall be the sole responsibility of the Contractor without adjustment to the Contract Sum or the Contract Time. The Contract Sum shall not be adjusted on account of any disruption, reduction or elimination of electrical power service to the Site, unless the same is caused by the District's non-payment of undisputed utility charges for such electrical power service. Contractor shall provide power outlets for construction operations, with branch wiring and distribution boxes located as required to complete the Work.
- b. Contractor shall provide and maintain electrical power at the Site for construction purposes, for temporary facilities and trailers, and for any other site offices or trailers required by the Contract Documents. Contractor shall provide all necessary wiring and appurtenances for connection to District's system. Connect to District power at location(s) as directed by District.
- c. Contractor shall provide and maintain distribution of temporary electrical power and lighting to the Work, and for use by the Project Inspector and District Project Manager where applicable.
- d. Contractor shall provide temporary power main service disconnect and over current protection at convenient locations and as required by governing codes.

- e. The Contractor shall be responsible for providing temporary facilities as required to deliver power service from the point of connection to the point(s) of intended use.
 - f. Contractor shall verify characteristics of District power available for temporary service use and provide all transformers and/or other equipment necessary to modify District power for temporary use by the Contractor. Contractor shall pay all costs associated with any necessary modifications to District power for temporary use on the Work.
 - g. The Contractor shall provide, install, and maintain temporary electrical lighting wherever necessary to provide illumination for the proper performance and/or observation of the Work.
2. **Temporary Communications/Telephone**
- a. ***Contractor is not required to provide a field office on the project site but shall provide a full-time superintendent on site at all times work by the Contractor or its subcontractors is occurring at the project site. The Contractor's Superintendent shall have a cell phone in their possession any time this person is at the project site. The cell phone shall have voicemail capability. Also see Section 01311, Project Management and Coordination, Article 1.11A regarding the requirement for the Contractor to use the District's EADOC Construction Management Software.***
 - b. *Not Used.*
 - c. *Not used.*
 - d. *Not Used.*
 - e. *Not Used.*
 - f. *Not Used.*
3. **Temporary Water**
- a. Not used.
 - b. Contractor shall be allowed to utilize water from the **District for only domestic use** but shall be responsible for providing all necessary connections and related work to the nearest available source of domestic water. **Water shall not be provided nor used for dust control, street cleaning, cleaning tools, soil compaction, or vehicle washing. Water used for such purposes shall be provided by the Contractor at its expense.**
 - c. Contractor shall provide and maintain necessary temporary water supply connections, pipes, hoses, nozzles, and fittings required. Before final acceptance, all temporary water supply components installed by Contractor shall be removed in a manner approved by District's Representative.
 - d. Unnecessary waste of water will not be permitted. Special hydrant wrenches shall be used for opening and closing fire hydrants, in no case shall pipe wrenches be used for this purpose. **Contractor shall obtain written approval and pay all required fees of governing agencies having jurisdiction (e.g., EBMUD and Contra Costa County Fire Protection District/CCCFPD prior to using any fire hydrant water on or off Contra Costa Community College District property.**
 - e. Contractor shall provide and use backflow preventers on water lines at point of connection to any District water supply. Backflow preventers shall comply with requirements of California Uniform Plumbing Code. The installation and removal of

all temporary backflow preventers on the Site shall be the sole responsibility of the Contractor without any adjustment to either the Contract Sum or the Contract Time. Before final acceptance, all temporary connections and piping installed by Contractor shall be removed in a manner approved by District's Representative.

- f. Contractor shall provide and make potable water available for human consumption. Contractor shall provide and maintain suitable quality water service required for construction operations.

4. Temporary Fences

- a. Temporary Fencing: Contractor shall provide temporary fencing around the project site as shown on **Drawing C2.00 Limit of Work** boundary for public safety, security and protection. Provide chain link fencing not less than **six (6) feet in height**, complete with metal posts and required bracing, anchorage, and with truck and pedestrian gates. All vehicle and pedestrian gates and openings shall have gates secured after hours of operation. **Caution. The project site is subject to very high winds and the Contractor shall be responsible for securing temporary fencing to withstand said high winds, especially considering the adjacent pedestrian and vehicular paths of travel.** Contractor shall provide fencing in a manner that will prevent people and animals from easily entering site except by entrance gate. ***Contractor shall plan and include the cost to move the temporary fencing in some locations multiple times as necessary to comply with the various access/closure requirements.***
- b. Contractor shall provide padlocks used for securing all gates. Padlocks shall be designed to prohibit cutting of shackle. Contractor shall coordinate keying strategy with **District and the Contra Costa County Fire Protection District.**
- c. Contractor shall be responsible for locking gates and shall be secured with minimum 3/8-inch-thick, 30 grade coil chain, minimum 5/16-inch cable. Gates shall be kept closed and always locked when not in use.
- d. All existing fences affected by the Work shall be maintained by Contractor until Final Completion of Project. Fences which interfere with construction operations shall not be relocated or dismantled until District gives written permission to do so, and the timing of fence relocation or dismantling has been agreed upon. Where fences must be maintained across the construction easement, adequate gates shall be installed.
- e. Contractor will be responsible for maintaining security by limiting number of keys and restricting distribution to authorized personnel.
- f. Security Enclosure and Lockup: Install substantial temporary enclosure around partially completed areas of construction. Provide lockable entrances to prevent unauthorized entrance, vandalism, theft and similar violation of security.
- g. Contractor shall provide secure lockup for stored materials and equipment which are of value or attractive for theft.
- h. Contractor shall be responsible for project security for materials, tools, equipment, supplies and completed and partially completed Work.
- i. On completion of the Work across any tract of land, Contractor shall restore all fences to their original or to a better condition, and to their original locations.

5. Temporary Protection of Public and Private Property

- a. Contractor shall protect, shore, brace, support and maintain all existing underground utilities including but not limited to the following: all pipes, conduits, drains and other underground construction uncovered or otherwise affected by construction operations.
- b. All pavement, surfacing, driveways, curbs, walks, buildings, utility poles, guy wires, fences and other surfaces structures affected by construction operations, together with all sod and shrubs in yards, planting areas, and medians, shall be restored to their original condition, wherever affected by construction operations. All replacements shall be made with new materials.
- c. Contractor shall be responsible for all damage to streets, roads, highways, shoulders, ditches, embankments, culverts, bridges and other public or private property, regardless of location or character, which may be caused by transporting equipment, materials, or workers to or from the Work, Site or any part thereof, whether by Contractor or Subcontractors. Contractor shall be solely responsible without adjustment of the Contract Sum or the Contract Time to make satisfactory and acceptable arrangements with the District, or the agency or authority having jurisdiction over the damaged property, concerning its repair or replacement or payment of costs incurred in connection with the damage.
- d. All fire hydrants and water control valves shall be always kept free from obstruction and available for use.

6. Temporary Sanitary Facilities

- a. Contractor shall provide and maintain temporary sanitary toilets for use of all workers throughout the course of the Work. At a minimum, sanitary facilities shall be located at the trailer site, Contractor staging area(s) and adjacent to Work areas.
- b. Sanitary facilities shall be of reasonable capacity, properly maintained throughout the Project, and obscured from public view to the greatest practical extent. If toilets of the chemically treated type are used, at least (1) toilet will be furnished for each (15) persons. Contractor shall enforce the use of such sanitary facilities by all personnel at the Site.
- c. Contractor shall comply with all minimum requirements of the Contra Costa Health Department or other public agency having jurisdiction.
- d. Always maintain temporary facilities in a sanitary condition during the Project.
- e. Contractor will keep sanitary facilities free from graffiti.
- f. Use of toilet facilities in the Work under construction shall not be permitted.
- g. Contractor is not permitted to use existing Campus toilet facilities.
- h. All Portable toilets shall be located within fenced areas of the Project Site
- i. Contractor shall be responsible for providing access to the temporary toilet facilities.

7. **Temporary Barriers and Enclosures**

- a. Contractor shall provide barriers to prevent unauthorized entry to construction areas to allow for District's use of the Site, and to protect existing facilities and adjacent improvements from damage during construction operations.
- b. Contractor shall provide barricades as required by the Contract Documents, governing agencies, and/or field conditions to protect public access pathways to existing buildings scheduled to remain open during any Phase of the Work.
- c. Contractor shall protect vehicular traffic, stored materials, Site, and existing structures from damage.
- d. Contractor shall provide and maintain temporary enclosures to prevent public entry to any construction area, and to protect all persons using other existing buildings and portions of the Site and/or Premises Contractor shall maintain safe access to all existing facilities to remain in operation during any phase of the Work.

8. **Temporary Pollution Control**

- a. Contractor shall prevent the pollution of drains and watercourses by sanitary wastes, sediment, debris and other substances resulting from construction activities. No sanitary wastes shall be permitted to enter any drain or watercourses other than sanitary sewers. No sediment, debris or other substance shall be permitted to enter sanitary sewers without authorization of the receiving sanitary sewer service and all possible Best Management Practices (BMPs) shall be taken to prevent such materials from entering any drain to watercourse. Rate of discharge for storm water may be not increased by the Project during or following construction.
- b. If dewatering of excavations is required, Contractor shall obtain the necessary approval and permits for discharge of the dewatering effluent from the local jurisdiction. Contractor shall be responsible for assuring that water quality of such discharge meets the appropriate permit requirements prior to any discharge.
- c. **Contractor shall comply with the District's Storm Water Pollution Prevention Plan, which is applicable for this Project.**

9. **Construction Aids**

- a. Contractor shall furnish, install, maintain and operate all construction aids as required for the performance of the Work. Such construction aids include, but are not limited to, elevators and hoists, cranes, temporary enclosures, swing staging, scaffolding, and temporary stairs.

10. **Erosion Control**

- a. Contractor shall comply with the District Storm Water Pollution Prevention Plan for this Project.
- b. Contractor shall prevent soil erosion on the Site and adjacent property resulting from its construction activities to the maximum extent practical, including implementation of Best Management practices. Effective measures shall be initiated prior to the commencement of clearing, grading, excavation or other operations that will disturb the natural protection.

- c. Work shall be scheduled to expose areas subject to erosion for the shortest possible time and natural vegetation shall be preserved to the greatest extent practicable. Temporary storage, temporary construction buildings and temporary Field office buildings shall be located, and construction traffic routed to minimize erosion. Contractor shall provide temporary fast-growing vegetation or other suitable ground cover shall be provided as necessary to control runoff.

11. Vehicular and Pedestrian Traffic Controls

- a. The Campus is an active site, with vehicular and pedestrian traffic occurring at all times of the day and all days of the week. Contractors shall coordinate with District's Representative concerning vehicular traffic associated with the construction to minimize disruption to campus operations. Delivery trucks and large equipment shall enter the Contractors access gate and shall use the route mutually agreed upon between District and Contractor. Contractor shall provide signage directing construction and delivery traffic to this gate. Contractor shall provide information regarding sign types, size, material, text and locations to be reviewed and approved by the District Representative, and the Campus prior to installation. See Article 12 below for additional requirements, **and Section 01140, Work Restrictions for additional requirements for vehicular access, traffic control and related restrictions and requirements.**
- b. **Fire Access Road: Contractor shall always keep all required Fire District (CCCFPD) and emergency vehicle access paths free from obstruction during the Project. See Drawing AD1.3 for the location of the existing fire lane adjacent to the Project Site. The Contra Costa County Fire Protection District always requires unobstructed access along this road. The Contractor will not be allowed to park vehicles along the fire lane, nor be allowed to store any materials or equipment that obstructs the path of travel by the Fire District (CCCFPD), unless approved in writing by both the Fire District and the District.**
- c. **Bid Alternate #3, Boiler Room Building Abatement and Demolition: If this add alternate is selected by the District, the Contractor shall include in its bid for this add alternate the cost to protect the new fire access road from damage using metal plates or other District approved means of protection. No equipment will be allowed to be staged during the day or overnight on this road during the demolition of this building since the Fire District requires this lane to be free of obstructions in the event of a fire. Contractor will be required at its expense to repair damage to this road should it occur to the satisfaction of the District.**
- d. **Northeast Entrance to Fire Access Road: The Northeast Entrance to the fire access lane is heavily traveled by pedestrian traffic (students and faculty). Consequently, if Bid Alternate #3 is selected by the District, Contractor shall include in its Bid Alternate #3 the cost to always provide a flag person when truck traffic is entering or existing the Northeast Entrance to remove the Boiler Room Building.**
- e. **Fire Access Road: Other than for the removal of the Boiler Room Building noted above, the Contractor is NOT allowed to use the Fire Access Road to perform any other Work (e.g., no access for the abatement and demolition of the Physical Sciences Buildings).**

12. Temporary Signage

- a. Sign must be reviewed and approved by the District and the Campus prior to installation. Contractor shall use an experienced sign company to produce all temporary signs. Install signs where indicated in Contract Documents, and/or as required by the District. Unauthorized signs are not permitted.
- b. Contractor shall provide temporary directional way-finding signs around the Project site to guide faculty, students, and visitors to safely navigate around construction activities at the Project site and to warn faculty, students, and visitors of potential safety hazards. Contractor shall provide **a minimum of 10 wayfinding signs** on metal posts to match existing at the Project Site, or on fencing or other structures as approved by the District. A sample way-finding sign is attached at the end of this section that provides basic dimensions, materials, backgrounds and related information. However, final proposed signs by Contractor shall be reviewed and approved by the District and Campus prior to fabrication and installation.
- c. In addition too way-finding signs, additional safety sign types shall include, but not be limited to: Danger/Construction Area/No Trespassing; Caution/Demolition Work in Progress; Do Not Enter/Authorized Personnel Only; Warning/Hard Hat Required Beyond this Point; Eye Protection Required Beyond this Point; Danger/Flammable Materials/ No Smoking Within 25 Feet; Danger/Keep Gate Closed; Caution/Laser Operation in Use; Caution/Overhead Work in Progress; Power Actuated Tools in Use; All Visitors Report to Job Trailer; Eye Wash Station; Authorized Access Only; Danger/No Trespassing; Caution/Construction Traffic; Caution/Pedestrian Traffic; Building Closed, and Contractor Deliveries. All signs shall be in both English and Spanish; and shall be in a quantity required and applicable as approved by the District. A sample safety sign type is attached at the end of this section for general guidance, but final proposed signs by Contractor shall be reviewed and approved by the District and Campus prior to fabrication and installation.
- d. Contractor shall maintain and touch-up signs, so they are always legible.

13. Temporary Heat and Ventilation

- a. Provide temporary heat as required to maintain adequate environmental conditions to facilitate progress of the work, to meet specified minimum environmental conditions for the Work and to protect materials and finishes from damage due to improper temperature and humidity conditions.
- b. Portable heaters shall be standard units complete with controls, appropriate safety features, and bear testing lab approval markings.
- c. Provide adequate forced ventilation of enclosed areas as required for proper installation and curing of materials, to disperse humidity, and to prevent hazardous accumulations of dust, fumes, vapors and gases.
- d. HVAC Equipment: Unless District authorizes use of permanent HVAC system, provide vented, self-contained, liquid-propane-gas or fuel-oil heaters with individual space thermostatic control.
 - i) Use of gasoline-burning space heater, open-flame heater or salamander-type heating units is prohibited.

- ii) Heating Units: Listed and labeled for type of fuel being consumed, by a testing agency acceptable to authorities having jurisdiction and marked for intended use.

14. Temporary Lighting

- a. **In addition to maintaining existing exterior light poles and lighting as shown on the drawings, the Contractor shall install temporary LED lighting every eight feet along the temporary fencing on 2x4 wood posts secured to the temporary fencing adjacent to pedestrian/vehicular paths of travel along Campus Drive on the north side of the project. Contractor shall submit its temporary lighting plan for review and approval by the District. Contractor shall procure said temporary lighting for the Project and remove when removing the temporary fencing.**

PART 2 – PRODUCTS

2.1 MATERIALS - Not used

PART 3 - EXECUTION

3.1 INSTALLATION, GENERAL

- A. Locate Contractor facilities where they will serve Project adequately and result in minimum interference with performance of Work. Relocate and modify facilities as required by progress of the Work during entire project including all phases of project.
- B. Provide each facility ready for use when needed to avoid delay. Do not remove until facilities are no longer needed or are replaced by authorized use of completed permanent facilities.
- C. Contractor shall verify and coordinate all relocation of facilities with the District Construction Manager.

3.2 OPERATION, TERMINATION AND REMOVAL

- A. Supervision: Enforce strict discipline in use of temporary facilities. To minimize waste and abuse, limit availability of temporary facilities to essential and intended uses.
- B. Maintenance: Maintain facilities in good operating condition until removal.
 - 1. Where appropriate, maintain operation of temporary enclosures, heating, cooling, humidity control, ventilation and similar facilities on a 24-hour basis where required to achieve indicated results and to avoid possibility of damage.
- C. Temporary Facility Changeover: Do not change over from using temporary security and protection facilities to permanent facilities until Substantial Completion and acceptance by the District.
- D. Termination and Removal: Remove each temporary facility when need for its service has ended, when it has been replaced by authorized use a permanent facility or no later than Final Completion. Complete or, if necessary, restore permanent construction that may have been delayed because of interference with temporary facility. Repair damaged Work, clean exposed surfaces and replace construction that cannot be satisfactorily repaired.

1. Materials and facilities that constitute temporary facilities are property of Contractor. District reserves the right to take possession of Project Identification signs, if any, at no cost to the District.
2. Remove temporary paving not intended for or acceptable for integration into permanent paving. Where area is intended for landscape development, remove soil and aggregate fill that do not comply with requirements for fill or subsoil. Remove materials contaminated with road oil, asphalt and other petrochemical compounds, and other substances that might impair growth of plant materials or lawns. Repair or replace street paving, curbs and sidewalks at temporary entrances, as required by authorities having jurisdiction.
3. Clean and renovate permanent facilities used during construction period prior to Final Completion.

END OF SECTION 01500

SECTION 01505

CONSTRUCTION AND DEMOLITION WASTE MANAGEMENT

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. All Contract Documents shall be reviewed for applicable provisions related to the provisions in this document, and provisions in the General Conditions and other Specification Sections shall apply to this Section without limitation.

1.2 SUMMARY

- A. The District has established that this Project shall generate the least amount of waste possible and that processes that ensure the generation of as little waste as possible due to error, poor planning, breakage, mishandling, contamination, or other factors shall be employed.
- B. Of the inevitable waste that is generated, as many of the waste materials as economically feasible shall be reused, salvaged, or recycled. Waste disposal in landfills shall be minimized.

1.3 WASTE MANAGEMENT GOALS FOR THE PROJECT

- A. The District has established that this Project shall minimize the creation of construction and demolition waste, and shall divert a minimum of 75% of Project generated waste from landfills. Factors that contribute to waste such as over packaging, improper storage, ordering error, poor planning, breakage, mishandling, and contamination, shall be minimized. Of the inevitable waste that is generated, as many of the waste materials as economically feasible shall be reused, salvaged, or recycled. Waste disposal in landfills shall be minimized. Both recycled and waste need to be logged and documented by volume and weight.
- B. Diversion Goals: A minimum 75% of total Project waste shall be diverted from landfill. The following waste categories, at a minimum, shall be diverted from landfill. These materials include, but not limited to:
 - 1. Landscape and land clearing debris (green wood materials)
 - 2. Asphalt pavement
 - 3. Gravel and aggregate products
 - 4. Concrete
 - 5. Masonry scrap and rubble (brick, concrete, masonry, stone)
 - 6. Metals (ferrous and nonferrous)
 - 7. Clean wood (dimensional lumber, sheet goods, millwork, scrap, pallets)
 - 8. Plastics (films, containers, PVC products, polyethylene products)
 - 9. Asphalt/Bituminous roofing
 - 10. Insulation Materials
 - 11. Glass (un-tempered)
 - 12. Door and window assemblies
 - 13. Carpet and carpet pad
 - 14. Fibrous acoustic materials
 - 15. Ceiling Tiles
 - 16. Plumbing fixtures and equipment
 - 17. Mechanical equipment

18. Lighting fixtures and electrical components
19. Cardboard packing and packaging
20. Furniture
21. Sheet Rock
22. Electronic Waste
23. Universal Waste
24. Paper

1.4 REFERENCES AND RESOURCES

- A. This information is provided for Contractor's convenience only, and the District does not warrant its accuracy. County specific information is available on the Contra Costa County Waste Reduction and Recycling web page at <http://www.co.contra-costa.ca.us/depart/cd/recycle/index.html>. Additional information may also be found at the County conservation web page at <http://www.cccounty.us/index.aspx?NID=285>. Refer to the Contra Costa County Builder's Guide to Reuse & Recycling and the Contra Costa County Recycling Guide.
- B. The following sources provided for references:
 1. BuildingGreen.com
 2. California Department of Resources Recycling and Recovery (also known as CalRecycle)
 3. Office of Land and Emergency Management (OLEM)
 4. Construction Waste Management Handbook

1.5 QUALITY ASSURANCE:

- A. Regulatory Requirements. Comply with applicable requirements of the State of California, local ordinances and regulations concerning management of construction, clearing, and inert materials.
- B. Disposal Site, Recyclers and Waste Materials Processors. Use only facilities properly permitted by the State of California, and/or by local authorities where applicable.

1.6 WASTE DIVERSION DOCUMENTATION

- A. Provide the District with delivery receipts for the recovered materials and waste materials sent to the permitted recycling facilities, processing facilities, or landfill with the following information on a form to be approved by the District:
 1. Name of firm accepting the recovered materials or waste materials
 2. Specify type of facility (e.g. retail facility, recycler, processor, Class III landfill, MRF)
 3. Location of the facility
 4. Type of materials
 5. Net weights (or volume) of each type of material
 6. Date of delivery
- B. Application for Progress Payments: Contractor shall submit with each Application for Progress Payment a Summary of the project waste generated. Failure to submit this information shall render the Application for Payment incomplete and shall delay Progress Payment. The District

and its representatives shall not be responsible for delaying Progress Payments. With each Application for Payment, submit required Progress Documentation, including.

1. manifest
2. weight tickets
3. receipts
4. and invoices specifically identifying the project and waste material.

PART 2 - PRODUCTS - Not Used

PART 3 - EXECUTION

3.1 STORAGE AND HANDLING

A. Site Storage

1. Remove materials for recycling and recovery from the work locations to approved containers or storage area as required. Failure to remove waste or recovered materials will be considered cause for withholding payment and termination of Contract.
2. Position containers for recyclable and recoverable waste materials at a designated location on the Project Site. If materials are sorted on site, also provide a sorting area and necessary storage containers.
3. Change-out loaded containers for empty containers, as demand requires.
4. If recovered materials are stored on-site for project duration provide adequate security from pilferage.

B. Handling

1. Deposit indicated recyclable, and recoverable materials in storage areas or containers in a clean (no mud, adhesive, solvents, petroleum contamination), debris-free condition. Do not deposit contaminated materials into the containers until such time as such materials have been cleaned.
2. Insure all recovered materials are made safe for handling and storage.
3. If the contamination chemically combines with the material so that it cannot be cleaned, do not deposit into the recycle containers. In such case, request resolution by the District for disposal of the contaminated material. Directions from the District do not relieve the Contractor of responsibility for compliance with all legal and regulatory requirements for disposal, nor shall such directions cause a request for modification of the Contract.

3.2 PROJECT CONDITIONS

A. Site Condition:

1. Signs and instructions should be clear, and easy to understand. All recycling containers should be clearly labeled and lists of acceptable and unacceptable materials will be posted throughout the site. Whenever possible, they should be in multiple-languages, especially in Spanish, and in graphic symbols.
2. The Contractor shall ensure the safety of all personnel involved in the waste management process.

3. A Site Management Plan shall be created by the Contractor including: work areas, materials processing areas, materials storage and disposal areas, worker hand-washing and changing stations, first aid and medical information.

END OF SECTION 01505

SECTION 01572

STORM WATER POLLUTION PREVENTION – SITES THAT DISTURB ONE OR MORE ACRES OF LAND

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. All Contract Documents shall be reviewed for applicable provisions related to the provisions in this document, and provisions in the General Conditions and other Division 1 Specification Sections shall apply to this Section without limitation.

1.2 RELATED DOCUMENTS SPECIFIED IN OTHER SECTIONS

- A. Section 01010 – “Summary of Work”
- B. Section 01050 – “Field Engineering”
- C. Section 01140 – “Work Restrictions”
- D. See SECTION 00700 GENERAL CONDITIONS for submittal procedures
- E. NOT USED
- F. Divisions 2 through 33 Sections for Storm Water Prevention Plan requirements for the work in those sections, where applicable.

1.3 BACKGROUND

- A. Storm drains discharge directly to creeks and the Bay without treatment. Discharge of pollutants (any substance, material, or waste other than uncontaminated storm water) from this project into the storm drain system is strictly prohibited by the State Water Resources Control Board (SWRCB) Order 2009-0009 DWQ (Order) and California Regional Water Quality Control Board (RWQCB) Water Quality Control Plan San Francisco Bay Basin Plan (Basin Plan).
- B. **This specification is applicable to this Project since it will disturb (e.g., digging, trenching, grading, clearing, filling) one or more acres of land surface.**
- C. This specification also covers Linear Underground/Overhead Projects as regulated by the Order.
- D. Area of land surface disturbance includes but is not limited to:
 - 1. Clearing of the land both for access (i.e. access roads) to the site as well as preparing the site for constructing the project,
 - 2. Constructing access roads to the Site,
 - 3. Grading of the Site in total,
 - 4. Equipment staging area, maintenance area, and construction easement if they occur atop a soil surface which has not been included in the calculation for area of soil disturbance,
 - 5. Material and/or soil stockpiles if atop a soil surface (not if atop an impervious surface such as concrete or asphalt),

6. Area of asphalt or concrete pavement removal if it is removed entirely to the soil surface,
7. Area that is related to demolition and removal of existing structures if that demolition and removal is to the soil surface,
8. Concrete truck clean-out areas if atop a soil surface

1.4 SUMMARY OF WORK

- A. The District will provide storm water pollution prevention plan as specified and as required by appropriate regulatory authorities, complete.
- B. Work In this section includes all labor, equipment, and materials necessary for the implementation, maintenance, and monitoring of the Storm Water Pollution Prevention Plan (SWPPP). Principal items of work included herein include, but are not limited to:
 1. Plan administration, maintenance, and updating.
 2. Placement of erosion/pollution control devices (where applicable).
 3. Maintenance and monitoring of control devices.
 4. Miscellaneous related work necessary for plan compliance.
 5. Reports and certificates.
 6. Monitoring and associated report (**based on Risk Level I Site**).
- C. Work under all other sections of this specification shall comply with the requirements of this section. All trades working on the Project need to be aware of and in compliance with the SWPPP.
- D. All materials that can potentially enter and/or pollute storm water discharges and the generation of non-storm water discharges shall be in compliance with the SWPPP. Representative materials and procedures include erosion control of construction vehicles and equipment, and general construction debris potentially entering the storm drain system's natural flow course.

1.5 REQUIREMENTS

- A. The State Water Resources Control Board uses the Storm Water Multiple Application and Report Tracking System (SMARTS) web-based application for storm water permit processing and tracking. The Contractor shall input data and upload documents required for storm water permit compliance. The program is also responsible for processing, reviewing, updating, annual reports, and maintaining the billing status of each discharger. SMARTS has been developed to provide an online tool to assist dischargers in submitting their NOIs, NECs, NOTs, and Annual Reports, as well as, viewing/printing Receipt Letters, monitoring the status of submitted documents, and viewing their application/renewal fee statements. The system will also allow the Regional Board and State Board staff to process and track the discharger submitted documents.

SMARTS is a user account and password protected system where a valid user account and password is needed to access the system. The District will prepare and submit the Permit Registration Documents. The Contractor's QSP shall submit any required changes to the documentation electronically to the District at least 15 working days prior to the land surface disturbance at the Site. Once the documents are approved, the Contractor shall upload the required data and documents to the SMARTS web site.

- B. Contractor shall provide a Qualified Storm-Water Pollution Prevention Plan (SWPPP) Practitioner (QSP) for SWPPP development and implementation as defined in the Order ("Qualified" means the developer and/or practitioner possesses the necessary professional license, i.e. Professional Engineer, Geologist, etc. and has passed any exam(s) required to obtain the QSD/QSP certification. Refer to the specific requirements as shown within the SWRCB General Construction Permit and regulations). The QSP shall input and maintain data and documents in the SMARTS web site to ensure compliance with the state storm permit at all times.
- C. Provide all material, labor, equipment, for installation, implementation, and maintenance of all surface-water pollution prevention measures. This work includes the following:
 - 1. Furnishing, placing, and installing effective measures for preventing erosion and runoff of soil, silts, gravel, hazardous chemicals or other prohibited materials defined by the SWRCB and RWQCB.
 - 2. Managing on-site construction materials in such a manner as to prevent said materials from contacting storm water or wash water and running off-site into the storm drain system.
 - 3. Complying with applicable standards and regulations for water pollution and erosion control.
 - 4. Include post-construction storm water pollution prevention structures in the storm water pollution prevention plan. Contractor shall use construction drawings as the reference for post-construction BMPs.
- D. Contractor will not be required to maintain post-construction pollution prevention structures. However, Contractor is required to provide operations and maintenance documents to the District at the end of construction.
- E. In this section, the term "storm drain system" shall include storm water conduits, storm drain inlets and other storm drain structures, street gutters, channels, watercourses, creeks, lakes, and the San Francisco Bay.
- F. Sanitary sewer discharge regulations are intended to provide protection of the sanitary sewer system and appropriate municipal utility water pollution control plant. In this specification, "sanitary sewer" shall include any sanitary sewer manhole, clean-out, side sewer or other connection to the area wastewater treatment plant.
- G. Contractor shall have storm drain pollution prevention measures in place and follow this specification anytime rain is predicted in the San Francisco Bay Area by the National Oceanic and Atmospheric Administration (NOAA) prediction for rain at or above 50%. It is the responsibility of the Contractor to be prepared for a rain event at all times required by the Order, to be aware of weather predictions, and to perform actions triggered by prediction of such rain events. The District is not responsible for informing the Contractor of rain predictions.
- H. Construction site sanitary sewer blockage will likely result in a back-up and overflow to the storm drain system. The Contractor shall immediately notify the District and the Project Inspector of record if there is a clogged sanitary sewer, and implement a plan to re-direct sewage if an overflow of the sanitary sewer will result in sewage discharge to the storm drain.
- I. Contractor shall not allow any non-storm water to enter the storm drain system. Non-storm water includes domestic supply water used to wash streets, painting and drywall equipment,

tools, equipment, or vehicles. Except for certain fire-line flushing and testing procedures, contact the District for discharge approval.

1.6 REGULATIONS AND STANDARDS

- A. Contractor shall comply with the following applicable regulations:
 - 1. Clean Water Act, United States Environmental Protection Agency, and Porter-Cologne Clean Water Act, State of California.
 - 2. "San Francisco Bay Basin (Region 2) Water Quality Control Plan" (Basin Plan), California Regional Water Quality Control Board,
 - 3. California State Water Resources Control Board NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) GENERAL PERMIT FOR STORM WATER DISCHARGES ASSOCIATED WITH CONSTRUCTION AND LAND DISTURBANCE ACTIVITIES, Order 2009-0009 DWQ (Order) and all Amendments.
- B. Contractor shall comply with industry-standard guidelines on storm drain pollution prevention, such as:
 - 1. "Erosion and Sediment Control Field Manual" California Regional Water Quality Control Board (RWQCB)—San Francisco Bay Region.
 - 2. 2009 CASQA Construction BMP Handbook, available electronically at the California Stormwater Quality Association (CASQA) interactive web portal.

1.7 SUBMITTALS/DELIVERABLES

- A. Some or all of the following documents may be required, depending on the site Risk calculation, monitoring requirements, construction phase storm water treatment systems, and post-construction storm water treatment structures:
 - 1. Storm Water Pollution Prevention Plan created by the District's QSD
 - 2. Site Map
 - 3. Post-construction water balance form
 - 4. ~~Risk Calculation~~
 - 5. Active Treatment Systems plans (based on Risk Level 1)
 - 6. Others as may be required by the State Water Resources Control Board Order 2009-0009 DWQ.
 - 7. Erosion control and water pollution control drawings based on actual construction phasing and staging locations. Contractor shall use construction drawings and requirements from the construction general permit as the reference for these drawings.
- B. The Notice of Intent (NOI) and the initial PRD will be completed by the District and uploaded for approval to the SMARTS web site. Once approved, any following revisions or updates during construction will be uploaded to the SMARTS web site by the Contractors' QSP.
- C. Monitoring Reports. Monitoring sampling results reports are mandated according to the Risk Level and specific characteristics of the Site as prescribed in the Order. Contractor shall determine the required monitoring reports according to the Order and submit a list of such documents to the District and the SMARTS database. When the Project is underway, the Contractor shall produce the mandated reports electronically and submit them to the District

and SMARTS electronically within 2 days of the conclusion of the rain event, and within 1 day of Numeric Action Level exceedance.

- D. Annual Reports. Contractor shall determine the required information according to the Order and electronically submit the Annual Report electronically to the District and the SWRCB via SMARTS database.
- E. Notice of Termination. The District, working in conjunction with the Contractor, shall determine the required information according to the Order and electronically submit Notice of Termination documents to the District and the SWRCB via the SMARTS database for each increment separately.
- F. Complete and provide the Post-Construction Water Balance Performance Standard Spreadsheet as found in Appendix 2/2.1 of the Order.

1.8 ENVIRONMENTAL ENFORCEMENT

- A. State, regional, and local agencies have authority to enforce, through codified regulations, any portions of this Section that if not implemented may violate applicable regulations. Agency enforcement may include but is not limited to: citations, orders to abate, bills for cleanup costs and administration, civil suits, and/or criminal charges. Contract compliance action by the District shall not be construed to void or suspend any enforcement actions by these or other regulatory agencies.

PART 2 - MATERIALS

2.1 GENERAL

- A. Provide materials as required for execution of the Work required by the approved Stormwater Pollution Prevention Plan, prepared by the District's QSD.

PART 3 - EXECUTION

3.1 GENERAL

- A. Report any hazardous or unknown material spills immediately to a District Representative. If a spill occurs after hours or on a weekend, contact the campus Police Department. The Contractor is responsible for ensuring that its employees and subcontractors (if any) working on site are aware of the location of the campus phone nearest the Site. The Contractor is also responsible for creating the necessary spill reports outlined in the construction general permit and must upload them to SMARTS.
- B. Adhere to the requirements of the Order.

3.2 SPILL PREVENTION AND CONTROL

- A. The Contractor shall keep spill cleanup materials, such as rags or absorbents, readily accessible on-site.
- B. The Contractor shall immediately contain and prevent leaks and spills from entering storm drains, and properly clean up and dispose of the waste and cleanup materials. If the waste is hazardous, the Contractor shall dispose of hazardous waste only at authorized and permitted Treatment, Storage, and Disposal Facilities, and use only licensed hazardous waste haulers to

remove the waste off-site, unless quantities to be transported are below applicable threshold limits to transportation specified in State and Federal regulations.

- C. The Contractor shall not wash any spilled material into streets, gutters, storm drains, or creeks and shall not bury spilled hazardous materials.
- D. The Contractor shall report any hazardous materials spill to **Emergency 911**.

3.3 DE-WATERING AND SEDIMENT MANAGEMENT AND NONHAZARDOUS MATERIAL/WASTE MANAGEMENT

- A. If storm water or groundwater in site excavations or drilled holes, (e.g., trenches, pits, pier holes, footings), needs to be removed, it shall be made clean by filtering, settling, or other method capable of removing solids and suspended particles from this water prior to discharge to the storm drain system. The Contractor shall ensure that this discharge complies with all applicable provisions of the Basin Plan.
- B. If excavation water is domestic supply water, or the water is contaminated with a hazardous substance, then the Contractor shall dispose of according to guidance from the District. For disposal authorization, the Contractor shall contact the District to determine the discharge requirement.
- C. If the Contractor suspects the presence of contaminated groundwater, or domestic supply water, the Contractor shall immediately notify the District. The Contractor shall not attempt to pump out or treat any material suspected of containing a hazardous material or petroleum product.
- D. Designated Area:
 - 1. The Contractor shall propose designated areas of the Site, for approval by the Engineer, suitable for material delivery, storage, and waste collection that, to the maximum extent practicable, are near construction entrances and away from catch basins, gutters, drainage courses, and creeks.
- E. Granular Material:
 - 1. The Contractor shall store granular material at least ten feet away from catch basin and curb returns.
 - 2. The Contractor shall not allow granular material to enter the storm drains or creeks.
 - 3. When rain is forecast within 24 hours or during wet weather, the Engineer shall require the Contractor to cover granular material with a tarpaulin and to surround the material with sand bags.
- F. Dust Control: The Contractor shall use reclaimed water if available to control dust on a daily basis or as directed by the QSP. If reclaimed water is not available, Contractor to use domestic water.

3.4 HAZARDOUS MATERIAL/WASTE MANAGEMENT

- A. Label all hazardous materials and hazardous wastes (such as pesticides, paints, thinners, solvents, fuel, oil, and antifreeze) in accordance with City, State and Federal regulations.
- B. Store hazardous materials and wastes in secondary containment and cover them during wet weather.

- C. Follow manufacturer's application instructions for hazardous materials and do not use more than necessary. Do not apply chemicals outdoors when rain is forecast within 24 hours.
- D. Arrange for appropriate disposal of all hazardous waste.
- E. See the Contract General Conditions, Article 10.4 and Division 2 specifications prepared by Terracon for more information and requirements on the removal of Hazardous Materials.

3.5 SANITARY SEWER DISCHARGE POINT IDENTIFICATION

- A. If the Contractor will be disposing of water from a settling operation, or any other water approved by the District for sanitary sewer disposal, the Contractor will verify with the Buildings and Grounds Department that the manhole used for disposal is a sanitary sewer and not a storm drain. (Note: do not assume that a manhole is a sanitary sewer, even if the words "sanitary sewer" is embossed on it. Sometimes utility maps and manhole cover designations are incorrect.)

3.6 WATER MAIN AND SANITARY SEWER LINE BREAK CONTINGENCY PLAN

- A. If working on or near a water main line or sanitary sewer line, the Contractor shall have a written emergency response plan that states procedures for responding to a break and release of supply water to the storm drain system. This plan shall be made part of the SWPPP. The Contractor shall meet the following requirements:
 - 1. Water Main Work
 - a. Determine the direction of water flow if the main were to break.
 - b. Build a containment berm between the work area and the storm drain inlet(s) that the water would flow into. Make the containment structure large enough to hold the water so that it can be pumped to a sanitary sewer.
 - c. Build this containment structure before digging.
 - d. If there is a water main break, pump the water that collects in the containment structure to a sanitary sewer.
 - e. If the containment fails, prevent chlorinated water from entering the storm drain system.
 - f. Put in place, before digging, sediment control structures upstream of drain inlets and at drain inlets.
 - g. If a break occurs, contact the District and Project Inspector of record immediately. Include in the plan the phone numbers of the District and Project Inspector contact information.
 - 2. Sanitary Sewer Line Work.
 - a. Determine where the sewage will flow if the work could cause a blockage.
 - b. Build a containment structure between the work area and the storm drain inlet(s) that the sewage water would flow into. Make the containment structure large enough to hold the sewage flow so that it can be pumped to a sanitary sewer.
 - c. Build the containment before working on the sewer line. Put in place, before digging, solids (toilet paper, etc.) control structures upstream of drain inlets and at drain inlets.

- d. If a sewage blockage occurs, pump it to a sanitary sewer, and do not allow it to flow into the storm drain system.
 - e. If the containment fails, prevent chlorinated water from entering the storm drain system by placing dechlorination sodium sulfite tablets in the sewage according to Attachment 2 of this Section).
 - f. If a sewage blockage or spill occurs, contact the District and Project Inspector of record immediately.
3. Excavation Work. This Paragraph applies to Contractors that excavate in the vicinity of sanitary sewer lines and cause or discover a sewage spill, leak or blockage.
- a. Immediately notify the District. The District will immediately notify Project Inspector. Include in the plan the phone numbers of the District and Project Inspector contact information.

3.7 PAVING OPERATIONS

- A. Project Site Management:
 - 1. When rain is forecast within 24 hours or during wet weather, the District or the QSP may prevent the Contractor from paving.
 - 2. The QSP may direct the Contractor to protect drainage courses by using control measures, such as earth dike, straw bale, straw wattles, and sandbag, to divert runoff or trap and filter sediment.
 - 3. The Contractor shall place drip pans or absorbent material under paving equipment when not in use.
 - 4. The Contractor shall cover catch basins and manholes when paving or applying seal coat, tack coat, slurry seal, or fog seal.
 - 5. If the paving operation includes an on-site mixing plant, the Contractor shall comply with the County's General Industrial Activities Storm Water Permit requirements.
- B. Paving Waste Management: The Contractor shall not sweep or wash down excess sand (placed as part of a sand seal or to absorb excess oil) into gutters, storm drains, or creeks. Instead, the Contractor shall, either collect the sand and return it to the stockpile, or dispose of it in a trash container. The Contractor shall not use water to wash down fresh asphalt concrete pavement.

3.8 SAW CUTTING

- A. During saw cutting, the Contractor shall cover or barricade catch basins using control measures, such as filter fabric, straw bales, sand bags, and fine gravel dams, to keep slurry out of the storm drain system. When protecting a catch basin, the Contractor shall ensure that the entire opening is covered.
- B. The Contractor shall vacuum saw cut slurry and pick up the waste prior to moving to the next location or at the end of each working day, whichever is sooner.
- C. If saw cut slurry enters catch basins, the Contractor shall remove the slurry from the storm drain system immediately.

3.9 CONTAMINATED SOIL MANAGEMENT

- A. The Contractor shall look for contaminated soil as evidenced by site history, discoloration, odor, differences in soil properties, abandoned underground tanks or pipes, or buried debris. If the Project is not within an area of known soil contamination and no evidence of soil contamination is found, then testing of the soil shall only be required if directed by the District.
- B. If the Project is within an area of known soil contamination or evidence of soil contamination is found, then soil from grading or excavation operations shall be tested by the District's testing agency. The soil shall be managed as required by designated agency.

3.10 CONCRETE, GROUT, AND MORTAR WASTE MANAGEMENT

- A. Material Management: The Contractor shall store concrete, grout, and mortar away from drainage areas and ensure that these materials do not enter the storm drain system.
- B. Concrete Truck/Equipment Wash Out:
 - 1. The Contractor shall not wash out concrete trucks or equipment into streets, gutters, storm drains, or creeks.
 - 2. The Contractor shall perform washout of concrete trucks or equipment off-site.

3.11 PERSONNEL TRAINING

- A. The Contractor shall train its employees working on the Site on the requirements contained in this Section. The Contractor shall document this training in writing. District representatives for the Site will request to see the training materials and records at the onset of work.
- B. The Contractor shall inform all subcontractors (if any) of the water pollution prevention requirements contained in this specification and include appropriate subcontract provisions to ensure that these requirements are met.

3.12 LIST OF CONTRACTORS DESIGNATED SWPPP CONTACTS AND PHONE NUMBERS

- A. Provide a list of employees that will be responsible for preparing, implementing and updating the SWPPP, including, but not limited to, the name of the Contractor's QSP.

END OF SECTION 01572

SECTION 01730

CUTTING AND PATCHING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. All Contract Documents shall be reviewed for applicable provisions related to the provisions in this document, and provisions in the General Conditions and other Division 1 Specification Sections shall apply to this section without limitation.
- B. Individual Product Specification Sections:
 - 1. Cutting and patching incidental to work of the section.
 - 2. Advance notification to other sections of openings required in work of those sections.
 - 3. Limitations on cutting structural members.

1.2 RELATED REQUIREMENTS SPECIFIED IN OTHER SECTIONS

- A. Section 01311 – “Project Management and Coordination”
- B. Section 01710 – “Cleaning Requirements”
- C. Section 01722 – “Execution Requirements”
- D. Divisions 2 through 33 Sections for specific requirements and limitations applicable to cutting and patching individual parts of the Work.

1.3 DEFINITIONS

- A. Cutting: Removal of in-place construction necessary to permit installation or performance of other Work.
- B. Patching: Fitting and repair work required to restore surfaces to new or original conditions after installation of other Work.

1.4 RESPONSIBILITIES

- A. Contractor shall be responsible for all cutting, fitting, and patching, including associated excavation and backfill, required to complete the Work. This includes, but is not limited to:
 - 1. Making parts fit together properly
 - 2. Removal and replacement of defective Work
 - 3. Removal and replacement of Work not conforming to requirements of Contract Documents
 - 4. Provide routine penetrations of non-structural surfaces for installation of piping and electrical conduit
 - 5. Attaching new materials to existing improvements
 - 6. Painting (or other finishes) to match adjacent or existing conditions
- B. Contractor shall not cut or alter any part of the Work in such a way that endangers or compromises the integrity of the Work, the work of others, or the Project.

1.5 QUALITY ASSURANCE

- A. Operational Limitations: Do not cut and patch operating elements or related components in a manner that would result in reducing their capacity to perform as intended. Do not cut and patch operating elements or related components in a manner that would result in increased maintenance or decreased operational life or safety.
- B. Visual Requirements: Do not cut and patch exposed Work in a manner that would, in the Architect or District's opinion, reduce the building's aesthetic qualities. Do not cut and patch construction in a manner that would result in visual evidence of cutting and patching. Remove and replace construction cut and patched in a visually unsatisfactory manner as directed by District.
- C. Contractor shall ensure that all cutting, fitting, and patching shall achieve the security, strength, weather protection, and appearance for aesthetic match, efficiency, operational life, maintainability, safety of operational elements, and the continuity of existing fire ratings as required by the Contract Documents.
- D. Contractor shall ensure that cutting, fitting, and patching shall successfully duplicate undisturbed adjacent profiles, materials, textures, finishes, colors, and that materials shall match existing construction. Where there is dispute as to whether duplication is successful or has been achieved to a reasonable degree, the District's decision shall be final.
- E. Operational Elements: Do not cut and patch operating elements and/or related components in a manner that results in reducing their capacity to perform as intended, results in increased maintenance requirements, that decreases operational life, or that affects system or component safety. Operating elements include, but are not limited to the following:
 - 1. Fire-suppression systems.
 - 2. HVAC systems.
 - 3. Control systems.
 - 4. Mechanical systems piping and ducts.
 - 5. Air smoke barriers
 - 6. Telephone and communication systems.
 - 7. Electrical wiring systems.
 - 8. Primary operational systems and equipment.
- F. Miscellaneous Elements: Do not cut and patch miscellaneous elements or related components in a manner that could change their load-carrying capacity, that results in reducing their capacity to perform as intended, or those results in increased maintenance or decreased operational life or safety. Miscellaneous elements include, but are not limited to the following items:
 - 1. Exterior curtain wall construction
 - 2. Equipment supports
 - 3. Noise-and vibration-control elements and systems
 - 4. Water, moisture, or vapor barriers
 - 5. Membranes and flashings
 - 6. Vessels, and equipment

1.6 PAYMENT FOR COSTS

- A. Cost caused by ill-timed or defective cutting and patching Work or Work not conforming to Contract Documents, including costs for additional services of the District and its consultants will be borne by the Contractor and deducted from the Contract Price via Change Order by the District.
- B. Cost of Work cutting and patching Work performed upon approval from the District, other than defective or nonconforming Work, will be paid by District via written Change Order.

1.7 WARRANTY

- A. Existing Warranties: Remove, replace, cut, patch, and repair materials and surfaces damaged during cutting and patching operations, by methods and with materials so as not to void existing warranties of any affected Work.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Contractor shall provide for replacement and restoration of any Work affected by cutting and patching operations. Contractor shall comply with the Contract Documents and with the Industry Standard(s), for the type of Work involved. If not specified, Contractor shall first recommend a product of a manufacturer or appropriate trade association for approval by the District.
- B. Materials to be cut and patched include those damaged by Contractor in the performance of the Work.
- C. Use materials identical to existing materials. For exposed surfaces, use materials that visually match existing adjacent surfaces to the fullest extent possible. If identical materials are unavailable or cannot be used, use materials whose installed performance will equal or exceed that of existing materials and that are visually compatible in the sole opinion of the District.

PART 3 - EXECUTION

3.1 INSPECTION

- A. Contractor shall inspect existing conditions of the Site and the Work, including elements subject to movement or damage during cutting and patching, excavating and backfilling. After uncovering Work, Contractor shall inspect conditions affecting the installation of new products.
- B. Contractor shall report unsatisfactory or questionable conditions in writing to District as indicated in the Contract Documents, and shall proceed with Work as directed by District.

3.2 PREPARATION

- A. Contractor shall provide adequate shoring, bracing and supports as required to maintain structural integrity for all portions of the Project during cutting and patching operations.
- B. Contractor shall provide devices and means and methods to protect other portions of Project from damage during cutting and patching operations.

- C. Contractor shall provide all necessary protection from weather and extremes of temperature and humidity for the Project, including without limitation, any work that may be exposed by cutting and patching Work. Contractor shall keep excavations free from water.
- D. Avoid interference with use of adjoining areas or interruption of free passage to adjoining areas.
- E. Do not cut existing pipe, conduit, or ductwork serving existing buildings and/or other improvements that are scheduled to be removed or relocated until provisions have been made to bypass them. Maintain all active existing services at all times.

3.3 PERFORMANCE

- A. With respect to performance, Contractor shall:
 - 1. Execute cutting and patching Work to provide finished installation complying with specified tolerances and matching adjacent finishes.
 - 2. Execute cutting and patching using means and methods that will prevent damage to other Work, and that will result in proper surfaces to receive installation of repairs and/or new Work.
 - 3. Execute cutting, demolition, patching, excavating, and backfilling by methods that will prevent damage to other Work and damage from settlement or other movement.
 - 4. Contractor shall employ original installer or fabricator to perform cutting and patching for:
 - a. Weather-exposed surfaces and moisture-resistant elements such as roofing, sheet metal, sealants, waterproofing, and other similar Work.
 - b. Exposed finished surfaces
 - 5. Contractor shall fit Work airtight to pipes, sleeves, ducts, conduit, and other penetrations through surfaces. Contractor shall conform to Contract Document requirements for penetrations. If a discrepancy exists between applicable Code requirements and the Contract Documents, the more stringent requirement shall apply.
 - 6. Completed cutting and patching Work shall not affect the integrity of fire walls, ceilings, floors, smoke barriers, shafts, and similar components.
 - 7. Contractor shall restore Work which has been cut or patched. Contractor shall install new products to provide completed Work in accordance with requirements of the Contract Documents and as required to match adjacent areas and surfaces.
 - 8. Contractor shall refinish all continuous surfaces to nearest intersection as necessary to match the new finish to any existing finish.
 - 9. Cutting: Cut in-place construction by sawing, drilling, breaking, chipping, grinding, and similar operations, including excavation, using methods least likely to damage adjacent Work to remain. If possible, review proposed procedures with original Installer and comply with his written recommendations.
 - a. In general, use hand or small power tools designed for sawing and grinding, not hammering and chopping. Cut holes and slots as small as possible, neatly to size required, and with minimum disturbance of adjacent surfaces. Temporarily cover openings when not in use.
 - b. Finished Surfaces: Cut or drill from the exposed or finished side into concealed surfaces.

10. Concrete and Masonry: cut using a cutting machine, such as an abrasive saw or a diamond-core drill.
 11. Excavating and Backfilling: Comply with requirements in applicable specification sections where required by cutting and patching operations.
 12. Mechanical and Electrical Services: Cut off pipe or conduit in walls or partitions to be removed. Cap, valve, or plug and seal remaining portion of pipe or conduit to prevent entrance of moisture or other foreign matter after cutting.
 13. Proceed with patching after construction operations requiring cutting are complete.
 14. Patching: Patch construction by filling, repairing, refinishing, closing up, and similar operations following performance of other Work. Patch with durable seams that are as invisible as possible. Provide materials and comply with installation requirements specified in other Sections.
 15. Inspection: Where feasible, test and inspect patched areas after completion to demonstrate integrity of installation.
 16. Exposed Finishes: Restore exposed finishes of patched areas and extend finish restoration into retained adjoining construction in a manner that will eliminate evidence of patching and refinishing.
 - a. Clean all materials affected by cutting and patching operations before applying finishes.
 - b. Restore any damaged pipe covering to original condition.
 - c. Floors and Walls: Where walls or partitions that are removed extend from one finished area into another, patch and repair floor and wall surfaces in the both spaces. As required to provide an even surface of uniform finish, color, texture, and appearance. Remove in-place floor and wall coverings and replace with new materials as necessary to achieve uniform color and appearance.
 - d. Where patching occurs on a painted surface, apply specified primer and intermediate coats over the patch. Apply final coat over entire unbroken surface containing the patch. Provide additional coats as required until patched area blends completely with adjacent surfaces.
 17. Ceilings: Patch, repair, or re-hang in-place ceilings as necessary to provide a level, planar surface of uniform appearance.
 18. Exterior Building Enclosure: Patch components in a manner that restores enclosure to a weather-tight condition and results in a uniform visual appearance.
- B. Cleaning: Clean areas, spaces, materials, and/or equipment where cutting and patching Work is performed. Completely remove dirt, dust, cuttings, paint, mortar, oils, putty, adhesive, and any other similar materials.
- C. Alterations to Existing Work:
1. Existing work shall be cut, drilled, altered, removed, or temporarily removed and replaced as necessary for performance of work under the Contract. Work that is replaced shall match similar existing work. Structural members shall not be cut or altered, except where noted on drawings, without authorization of the Structural Engineer. Work remaining in place, which is damaged or defaced during this contract, shall be restored to the condition existing at time of award of contract.

2. Discolored or unfinished surface exposed by removal of existing work and indicated to be the final exposed surfaces shall be refinished or the material shall be replaced as necessary to make contiguous work uniform and harmonious. Work out of alignment, where exposed by removal of existing work, shall be called to the District's attention with a copy to the Architect's.

END OF SECTION 01730

SECTION 01785

OPERATION AND MAINTENANCE DATA

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. All Contract Documents shall be reviewed for applicable provisions related to the provisions in this document, and provisions in the General Conditions and other Specification Sections shall apply to this Section without limitation.

1.2 SUMMARY

- A. This section includes administrative and procedural requirements for Operation and Maintenance (O&M) data and documents.

1.3 FORMAT

- A. Contractor shall compile O&M manuals for all building equipment including mechanical, plumbing and electrical equipment, commissioned or not.
- B. Submit O&M Data specifically applicable to this contract and a complete and concise depiction of the provided equipment, product, or system, stressing and enhancing the importance of system interactions, troubleshooting, and long-term preventative maintenance and operation. Organize and present information in sufficient detail to clearly explain O&M requirements at the system, equipment, component, and subassembly level. Include an index preceding each submittal. Submit in accordance with this section and Section 00700, General Conditions.
 - 1. Package Quality. Documents must be fully legible. Poor quality copies and material with hole punches obliterating the text or drawings will not be accepted.
 - 2. Package Content. Data package content shall be as shown in the paragraph titled "Schedule of Operation and Maintenance Data Packages." Comply with the data package requirements specified in the individual technical sections, including the content of the packages and addressing each product, component, and system designated for data package submission.
 - 3. Changes to Submittals. Manufacturer-originated changes or revisions to submitted data shall be furnished by the Contractor if a component of an item is so affected subsequent to acceptance of the O&M Data. Changes, additions, or revisions required by the Architect or District Project Manager for final acceptance of submitted data, shall be submitted by the Contractor within 30 calendar days of the notification of this change requirement.

1.4 SYSTEMS COVERED

- A. The Contractor shall supply the required information for all systems identified in Contract Documents. A separate manual or chapter shall be provided for all new equipment or systems referenced in the Contract Documents.

1.5 COMPUTER PROGRAMS

- A. When any equipment requires operation by computer programs, submit copy of original program on CD, with a hard-copy and an electronic copy (Adobe PDF format) of all user

manuals and guides for operating the programs. Program shall be Windows compatible, latest edition or as requested by the District. Provide required licenses to District at no additional cost.

1.6 SUPPLEMENTAL DATA

- A. Contractor shall prepare written text and/or special drawings to provide necessary information when manufacturer's standard printed data is not available and/or additional information is necessary for a proper understanding and operation and maintenance of equipment or systems, or when it is necessary to supplement data included in the manual or Project documents.

1.7 SCHEDULE OF INFORMATION FOR OPERATION AND MAINTENANCE DATA PACKAGES

- A. Supply all of the following, when and where applicable, for each O&M data package:
 - 1. Safety precautions
 - 2. Operator prestart
 - 3. Startup, shutdown, and post-shutdown procedures
 - 4. Normal operations
 - 5. Emergency operations
 - 6. Operator service requirements
 - 7. Environmental conditions
 - 8. Lubrication data
 - 9. Preventive maintenance plan and schedule
 - 10. Cleaning recommendations
 - 11. Troubleshooting guides and diagnostic techniques
 - 12. Wiring diagrams and control diagrams
 - 13. Maintenance and repair procedures
 - 14. Removal and replacement instructions
 - 15. Spare parts and supply list
 - 16. Special tools required to service or maintain the equipment
 - 17. Corrective maintenance man-hours
 - 18. Product submittal data
 - 19. O&M submittal data
 - 20. Parts identification
 - 21. Warranty information
 - 22. Personnel training requirements
 - 23. Testing equipment and special tool information
 - 24. Testing and performance data
 - 25. Installing Subcontractor information

PART 2 – PRODUCTS - Not Used.

PART 3 – EXECUTION - Not Used.

END OF SECTION 01785

SECTION 01820

DEMONSTRATION AND TRAINING PROCEDURES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. All Contract Documents shall be reviewed for applicable provisions related to the provisions in this document, and provisions in the General Conditions and other Specification Sections shall apply to this Section without limitation.

1.2 SUMMARY

- A. This Section includes administrative and procedural requirements for instructing District's personnel, including the following:
 - 1. Demonstration of operation of systems, subsystems, and equipment
 - 2. Training in operation and maintenance of systems, subsystems, and equipment
 - 3. Demonstration and training videos

1.3 SUBMITTALS

- A. At completion of training, provide two (2) complete training manuals for the District's use.
- B. Attendance Record: For each training module, provide list of participants and length of instruction time.

1.4 QUALITY ASSURANCE

- A. Instructor Qualifications: A factory-authorized service representative or District approved equivalent, complying with requirements in Section 01400 (Quality Control Requirements), and technical specification sections where required. Service representative shall be experienced in operation and maintenance procedures and training for Project specific systems and equipment.
- B. Contractor shall coordinate instruction schedule and verify availability of educational materials, instructor's personnel, audiovisual equipment, and facilities needed to avoid delays.
- C. For instruction that must occur outdoors, review weather forecast and provide alternatives if conditions are unfavorable.

1.5 COORDINATION

- A. Contractor shall coordinate instruction schedule with District Construction Manager.
- B. Provide written notice ten (10) working days in advance to District Construction Manager, and Architect prior to any scheduling instruction sessions. District Construction Manager shall furnish Contractor with names and positions of intended participants.

PART 2 - PRODUCTS

2.1 INSTRUCTION PROGRAM

- A. Program Structure: Contractor shall develop and provide instruction program that includes group training modules for each system and equipment not part of a system, but included in individual Specification Sections.

- B. Training Modules: Contractor shall develop a learning objective and teaching outline for each module. Include a description of specific skills and knowledge that participant is expected to master. For each module, include instruction for the following:
1. Review basis of system design
 2. Operational requirements and criteria, including:
 - a. System, subsystem, and equipment descriptions
 - b. Operating standards
 - c. Regulatory requirements
 - d. Operating characteristics
 - e. Limiting conditions
 - f. Performance curves
 3. Detailed review of documentation, including:
 - a. Emergency manuals and procedures
 - b. Operations manuals and procedures
 - c. Maintenance manuals and procedures
 - d. Identification systems
 - e. Warranties and Guarantees
 - f. Maintenance service agreements and similar continuing commitments
 - g. Normal shutdown instructions
 - h. Required sequences for electric or electronic systems
 - i. Special operating instructions and procedures
 - j. Troubleshooting and diagnostics
 - k. Test and inspection procedures

PART 3 - EXECUTION

3.1 PREPARATION

- A. Assemble educational materials necessary for instruction, including documentation and training module. Assemble training modules into a combined training manual.
- B. Set up as required at instructional location.

END OF SECTION 01820

SECTION 02 82 00
CONTRA COSTA COMMUNITY COLLEGE DISTRICT
INC. 3: PS&B DEMO & ABATEMENT
ASBESTOS-CONTAINING MATERIALS ABATEMENT
PROJECT NO. C-4016

PART 1 - GENERAL

The following section has been developed due to the presence of Asbestos-Containing Materials (ACM) at the buildings scheduled for demolition at the Contra Costa College at 2600 Mission Bell Drive, San Pablo, California. Forensic Analytical Consulting Services (FACS) conducted a survey of suspect asbestos-containing materials at the project buildings, which included the Chemical Storage Building, Biological Science Building, Boiler Room Building, Physical Science Building North, Physical Science Building South and Chiller Unit.

The findings are presented in the Pre-Demolition Survey Report by FACS dated July 30, 2021, which is attached to these specifications.

1.01 SECTION CONTENTS

- A. This section specifies the methods, procedures, and requirements related to the removal and disposal of asbestos-containing materials (ACM) including, but not limited to:
 - 1. Regulatory requirements
 - 2. Submittals
 - 3. Personal protective measures
 - 4. Execution
 - 5. Inspections
 - 6. Waste handling and disposal

1.02 SCOPE OF WORK

- A. This section applies to the project buildings in which asbestos-containing materials will be disturbed by the planned building demolition. If additional suspect materials are discovered, the Contractor shall treat those materials as asbestos-containing unless testing proves otherwise. The Contractor will be responsible for complying with this section in the handling and disposal of ACM.

- B. In accordance with all drawings, specifications and instructions, Contractor shall furnish all labor, transportation, materials, supervision, equipment, insurance, taxes, overhead and all other items of expense, or services necessary for the removal and disposal of the subject ACM.
- C. The work of the Contract can be summarized as follows:
 - 1. Remove the ACM identified in the Pre-Demolition Survey Report in support of the planned building demolition.
 - 2. Removal of ACM shall follow the requirements as indicated in these specifications, including and not limited to submittals, training, work practice, and air monitoring.
- D. Before submitting a proposal, bidding contractors should carefully examine the drawing(s) and specifications, visit the site(s), fully inform themselves as to all existing conditions, and limitations and shall include in the proposal a sum to cover the cost of all items included in the Contract. It shall be the responsibility of the Contractor to examine the sites, to measure asbestos-containing materials, to be familiar with these plans and specifications for the work contemplated, and to thoroughly acquaint himself with the physical conditions to be encountered. Should the bidding contractor find discrepancies in or omissions from the drawings or Contract documents, or should clarification be needed, the bidding contractor shall notify the Owner who may send written instructions to all bidders.

1.03 REGULATIONS

- A. General Applicability of Codes, Regulations, and Standards: Except to the extent that more explicit or more stringent requirements are written directly into the contract documents, all applicable codes, regulations, and standards have the same force and effect (and are made a part of the contract documents by reference) as if copied directly into the contract documents, or as if published copies are bound herewith.
- B. Federal Regulations: Those which govern asbestos abatement work or hauling and disposal of asbestos waste materials include but are not limited to the following:

1. Code of Federal Regulations (CFR)

29 CFR Part 1910, Section 1001

29 CFR Part 1910, Section 134, Respiratory Protection

29 CFR Part 1926.1101, Asbestos Construction Standard

29 CFR Part 1910, Section 20, Access to Employee
Exposure & Medical Records

29 CFR Part 1910, Section 1200, Hazard Communication

29 CFR Part 1910, Section 145, Specifications for Accident
Prevention Signs and Tags

40 CFR Part 763, Subpart G, CPTS 62044, FLR 2843-9

Federal Register, Vol. 50, No. 134, 7/12/85, Worker
Protection Rule

40 CFR Part 61, Sub-part A, Regulation for Asbestos

40 CFR Part 61, Appendix A to Subpart M (Revised Subpart
B) National Emission Standard for Asbestos

40 CFR 763 Subpart E, Asbestos Hazard Emergency
Response Act (AHERA)

49 CFR Parts 171 and 172, Hazardous Substances: Final
Rule

C. State and Local Regulations: Abide by all state and local regulations which govern asbestos abatement work or hauling and disposal of asbestos waste materials, including but not limited to:

Bay Area Air Quality Management District (BAAQMD) -
Regulation 11 Hazardous Pollutants Rule 2, dated October 7,
1998 or more recent.

California Department of Occupational Safety and Health
(Cal-OSHA) – Asbestos Standard For The Construction
Industry, Title 8, California Code of Regulations section
1529, et. seq. (8 CCR 1529).

California Health and Safety Code sections 24914
(Hazardous Substance Removal Contracts); 25915, et. seq.

(Asbestos Notification Act); and 19827.5 (Demolition Permits).

California Labor Code sections 6501.5 (Employer Registration); and 6501.9 (Determining the Presence of Asbestos Prior to Contracting for Work).

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Prop. 65).

Applicability: The most current issue of the above document shall apply. Where conflict among requirements or with these specifications exists, the more strict or stringent requirement or interpretation shall apply.

- D. This work shall be "classified" as described in 8 CCR Section 1529, as follows.
1. Removal of asbestos-containing Thermal System Insulation and Surfacing Materials shall be classified as Class I work.
 2. Removal of all other asbestos-containing materials such as flooring materials, wall system, roofing materials, etc. shall be classified as Class II work.
 3. Any other asbestos-containing materials shall be classified in accordance with 8 CCR 1529.

1.04 DEFINITIONS

- A. General: Definitions contained in this Section are not necessarily complete but are general to the extent that they are not defined more explicitly elsewhere in the Contract Documents.
1. **ABATEMENT**: Procedure to control fiber release from asbestos-containing building materials.
 - a. Removal - All herein specified procedures necessary to remove asbestos-containing materials from building surfaces and structures.
 - b. Clean-up - All herein specified procedures necessary to clean asbestos-containing material or asbestos-contaminated debris from building surfaces or structures.
 - c. Post-Removal Surface Encapsulation - All herein specified

procedures necessary to coat building surfaces and structures from which asbestos-containing materials have been removed to control any residual fiber release.

- d. Abatement Activities - Any activity which disturbs or has the potential to disturb any asbestos-containing material. This includes, but is not limited to, the following activities: precleaning, installing polyethylene, ACM removal, encapsulation, and enclosure.
2. **ACBM OR ACM:** Asbestos-Containing Building Materials or Asbestos-Containing Materials.
3. **AIR LOCK:** A system for permitting ingress or egress without permitting air movement from a contaminated area into an uncontaminated area.
4. **AIR MONITORING/AIR SAMPLING:** The process of measuring the fiber content of a specific volume of air in a stated period of time. When "aggressive" air sampling is specified, blowers and fans are used to disperse settled fibers into the air during sampling.
5. **AMENDED WATER:** Water to which a surfactant has been added to reduce water surface tension and thereby provide a more rapid penetration.
6. **AUTHORIZED VISITOR:** Owner's representative, Owner's personnel or a representative of any regulatory or other agency having jurisdiction over the project.
7. **BARRIER:** Any surface which inhibits air and fiber movement from the Work Areas. Can be comprised of one or a combination of several materials, including but not limited to plywood, polyethylene sheeting, duct tape and spray-poly. A critical barrier is one which seals any opening (such as doorways, vents, window, penetrations) between the Work Area and non-Work Area.
8. **CONTAINMENT AREA:** An asbestos removal area which is sealed by critical barriers and fully enclosed with polyethylene sheeting. Workers enter/exit the containment area through a decontamination enclosure system.
9. **CURTAINED DOORWAY:** Device to allow ingress or egress from one room to another while permitting minimal air movement between the rooms, typically constructed by placing two

overlapping sheets of opaque 6-mil polyethylene over an existing or temporarily framed doorway, securing each along the top of the doorway, securing the vertical edge of one sheet along one vertical side of the doorway, and securing the vertical edge of the other sheet along the opposite vertical side of the doorway.

10. **DECONTAMINATION ENCLOSURE SYSTEM:** A series of connected rooms, with air locks between any two adjacent rooms, for the decontamination of workers and/or materials and equipment, constructed or moved onto site.
11. **EQUIPMENT DECONTAMINATION UNIT:** Decontamination enclosure system for materials and equipment, typically consisting of a designated area of the Work Area (wash-down station), a washroom, a holding room, a container room, and an uncontaminated area.
12. **FIXED OBJECT:** A unit of equipment or furniture in the Work Area which cannot be removed from the Work Area without dismantling.
13. **HEPA FILTER:** A high efficiency particulate air (HEPA) filter capable of trapping and retraining 99.97% of particles greater than 0.3 microns in diameter.
14. **HEPA VACUUM EQUIPMENT:** Vacuuming equipment with a HEPA filter capable of collecting and retaining asbestos materials/fibers.
15. **MINI-CONTAINMENT:** A mini-containment area provides an airtight enclosure around a high-hazard Work Area that is of limited size (for example a mini-containment may contain a 1'x1' area of SAAM to be removed).
16. **NEGATIVE AIR PRESSURE EQUIPMENT/EXHAUST AIR FILTRATION SYSTEM:** A local ventilation system, capable of maintaining a relative negative pressure throughout the containment area by providing a constant air flow from the containment area, through HEPA filters, to the area outside the building.
17. **NEGATIVE EXPOSURE ASSESSMENT INITIAL:** As stated in 29 CFR 1926.1101, "means a demonstration by the employer which complies with the criteria in paragraph (f) (2) (iii) of this section, that employee exposure during an operation is expected to be consistently below PEL's.

18. **NIOSH:** National Institute for Occupational Safety and Health.
19. **OWNER:** Contra Costa Community College District.
20. **OWNER'S REPRESENTATIVE:** Owner's Representative is responsible for monitoring, inspection, and enforcement of the specifications.
21. **PERSONNEL DECONTAMINATION UNIT:** A series of connected rooms, with curtained doorways between any two adjacent rooms, for the decontamination of workers and of materials and equipment. A decontamination enclosure system always contains at least one airlock. A three-stage decontamination unit consists of an equipment room, a shower, and a clean room.
 - a. Equipment Room: A contaminated area or room within the personnel decontamination unit with provisions for storage of contaminated clothing and equipment.
 - b. Shower Room: A room between the equipment room and the clean room with hot and cold running water suitably arranged for complete showering during decontamination.
 - c. Clean Room: An uncontaminated area or room which is part of the personnel decontamination unit with provisions for storage of workers' street clothes and protective equipment.
22. **PLASTICIZING:** Procedures necessary using polyethylene sheeting, adhesives, and/or taping to create an airtight Work Area.
23. **POST REMOVAL ENCAPSULANT:** A liquid substance which can be applied to surfaces from which asbestos-containing materials have been removed to control the possible release of residual asbestos fibers, either by creating a membrane over the surface (bridging encapsulant) or by penetrating into and binding the material (penetrating encapsulant).
24. **SURFACTANT:** A chemical wetting agent added to water to decrease the surface tension, thus improving the water's penetration into porous materials and in effect reducing the quantity of water required for wetting operations.
25. **WET CLEANING/WIPING:** The process of eliminating contamination from building surfaces and objects by using cloths,

mops, or other cleaning tools which have been dampened with water. Cleaning materials and non-reusable tools are disposed of as asbestos contaminated waste.

1.05 SUBMITTALS AND NOTICES

A. Pre-Job Submittals and Notices

1. Contractor shall make all required notifications to the appropriate Government Regulatory Agencies prior to beginning work. Prior to commencing work, submit two copies of all notifications to the Owner.
2. Prior to commencing work the Contractor shall submit to the Owner two (2) copies of the training, medical, and respiratory fit-testing documentation, described below, for each supervisor and worker who will be on-site for this project.
3. Contractor shall use only workers medically qualified and trained for asbestos work and respirator usage. Contractor shall submit statement from examining physician that each employee is fit to wear a respirator in accordance with 8 CCR Section 1529 within the last twelve months.
4. The asbestos training shall comply with 8 CCR Section 1529.
5. The Contractor shall provide the procedure he will employ for handling, packaging, transporting, and disposing of asbestos waste. These procedures must meet the requirements of 40 CFR, Part 61 subparts A and M.
6. Prior to commencing work the Contractor shall submit to Owner names and qualifications of each party responsible for transporting, storing, treating and disposing of asbestos waste. Include the facility location and a twenty-four-hour point of contact. Furnish two (2) copies of federal, state and local permit applications, permits and corresponding identification numbers.
7. The Contractor shall provide an abatement plan with methods and procedures covering each of the identified materials and abatement areas, including waste handling/disposal procedures.

B. Post-Job Submittals and Notices

Upon completion of the work, and prior to final payment, the Contractor

will prepare a report and submit it to the Owner. The report shall contain:

1. A copy of all notifications to or permits received from Federal, State, and local agencies for this project.
2. Waste Disposal Records, including signed manifests and receipts with certified weight.
3. A copy of the log maintained at the job site throughout the work.
4. Copies of all personal air monitoring results performed by the Contractor, including the location and credentials of the laboratory performing the analysis.
5. The name, title and signature of the person who prepared the report.
6. The report shall contain a statement certifying that the work has been completed in accordance with the project specifications.

1.06 OWNER'S REPRESENTATIVE

- A. The Owner may authorize a credentialed consultant to provide the following inspection, testing, and monitoring services including, but not limited to:
 1. Area air testing to establish pre-abatement and post abatement fiber concentrations.
 2. Visual inspections to verify Contractor's compliance with the specifications, as well as applicable regulations, regarding hazard control measures, and related decontamination procedures.
 3. Interpretation of technical sections of the contract documents, and coordination with Owner and Contractor for enforcement of regulatory and contractual conformance, including stop work issues.
- B. The cost of the Owner's Representative will generally be the responsibility of the Owner except under special circumstances. The Contractor shall be responsible for the cost of the Owner's Representative for additional services performed when:
 1. The Contractor's Work Area fails final clearance inspection and/or testing; or

2. Additional workdays or workday hours (overtime) are required by the Contractor; or
3. The Contractor exceeds the allowable time frame for completion; or
4. Additional services associated with response to an uncontrolled, unauthorized release to the environment as a result of the Contractor's performance of the work.

1.07 CONTRACTOR QUALIFICATIONS

- A. General Superintendent: Provide a General Superintendent whenever Contractor's personnel are on site who is experienced in administration and supervision of asbestos abatement projects including work practices, protective measures for building and personnel, disposal procedures, etc. This person is the Contractor's Representative responsible for compliance with all applicable federal, state and local regulations, particularly those relating to asbestos-containing materials.
- B. Experience and Training: The General Superintendent and all workers must have completed a course at an AHERA accredited Asbestos Abatement training provider and have had on-the-job training in asbestos abatement procedures.
 1. The asbestos training shall comply with 8 CCR Section 1529.
 2. Submit documentation for each worker per section 1.05.
 3. Each supervisor and worker shall have in his/her possession at all times a current Cal /OSHA certification.
- C. Contractor shall use only workers trained for asbestos work and medically qualified for respirator usage where applicable.

PART 2 - PRODUCTS

2.01 PROTECTIVE COVERING

- A. Polyethylene sheets, of 6 mil thickness, in dimensions of adequate width to minimize frequency of joints.

2.02 TAPE

- A. Duct tape, two inches or wider, capable of sealing joints of adjacent sheets of plastic sheeting or for attachment of plastic sheeting to finished

or unfinished surfaces.

2.03 PERSONAL PROTECTIVE EQUIPMENT

- A. Workers shall wear full body disposable Tyvek, or comparable, suits with hoods and separate booties, tape around ankles, wrists, under arms and neck. Suits will be worn inside the Work Area after the area passes pre-abatement inspection and shall remain in use until the area passes final clearance.
- B. Goggles with side shields will be worn when working with a material that may splash or fragment, or if protective eye wear is specified on the Safety Data Sheets (SDS) for that product.
- C. Additional respiratory protection by supplemental filters, such as organic vapor cartridges, may be needed when handling some coating products. Consult the SDS and obtain the proper filters as necessary. Contractor shall wear appropriate respiratory protection as outlined in 8 CCR Section 1529.
- D. In addition, all OSHA requirements, such as hard hats, hearing protection, etc. are required.

2.04 TOOLS AND EQUIPMENT

- A. Provide suitable tools for the decontamination and removal of asbestos-containing materials including required HEPA vacuums and exhaust units, airless sprayers, ground fault interrupters, hand tools, wipes, ladders, and scaffolds.
- B. Mechanical abrasion tools shall be equipped with local HEPA exhaust and subject to approval by the Owner's Representative.
- C. All tools and equipment brought on site shall be clean and free of contamination from asbestos and other hazardous materials.
- D. HEPA filtered equipment shall be labeled with a warning label and dedicated to asbestos work to prevent combining hazardous wastes of differing characteristics.
- E. Provide adequate support equipment, including, but not limited to lumber, hardware, handwashing facilities, sprayers, hoses, miscellaneous collection devices, and secured holding facilities.

PART 3 - EXECUTION

3.01 GENERAL

- A. The purpose of the Asbestos Construction Standard is to provide protection to workers who are occupationally exposed to asbestos. As a result, all activities which will entail disturbing asbestos-containing materials will be performed in accordance with the following work practices.

3.02 WORKER SAFETY/DECONTAMINATION PROCEDURES

The intent of the work is to remove ACM from the project buildings prior to their planned demolition. Based on the type of ACM that will need to be removed, asbestos abatement work shall be performed in accordance with 8 CCR Section 1529.

- A. Prior to commencement of work, the workers shall be instructed and shall be knowledgeable on the hazards of asbestos exposure, use and fitting of respirators, protective clothing, decontamination procedures and all aspects of asbestos work procedures; workers shall have medical examinations.
- B. The Contractor acknowledges that he alone is responsible for enforcing personnel protection requirements and that these specifications provide only a minimum acceptable standard for each phase of operation.
- C. Provide workers with personally issued and marked respiratory equipment approved by NIOSH and accepted by OSHA. All removal work to be performed in accordance with 8 CCR Section 1529.
- D. If the Contractor uses Type "C" air supplied respirators, they shall be pressure demand full face respirators.
 - 1. Air supply for Type "C" shall be, at minimum, grade "D" in compliance with OSHA 1910.134. The Contractor shall provide sampling and testing of air in the presence of Owner if requested to do so.
 - 2. Air supply for Type "C" removal operations shall be a positive pressure, externally supplied, compressed air system, incorporating enough high-pressure automatic air storage within an ASME certified air "bank" to provide each individual on line in the Work Area with sufficient air supply for decontamination in the event of a system failure.

3. The compressed air system for removal workers shall incorporate a calibration of CO alarm, compressor failure alarm, high temperature alarm, a continuous carbon monoxide monitoring device, and in-line purifying sorbent beds and filters to deliver air free of water, oil, odors, vapors, and particulates. Contractor shall comply with all applicable codes and regulations that apply to the operation of such system. Contractor shall submit documentation to the Owner which certifies that CO monitor and alarm devices have been calibrated and tested.
- E. Where not in conflict with NIOSH and OSHA requirements, the Contractor shall provide at a minimum, the following respirator protection for each phase of operation, unless otherwise approved by Owner:
1. Precleaning/Wet-Wiping of Area: NIOSH certified half-face air purifying respirators equipped with HEPA cartridges.
 2. Plastic Sheet Installation: NIOSH certified half-face air purifying respirators equipped with HEPA cartridges.
 3. Asbestos Removal and Clean-up: In accordance with those requirements stated in 8 CCR Section 1529.
 4. Loading Waste Material on Truck: (outside Work Area): NIOSH certified half-face air-purifying respirators equipped with HEPA cartridges.
- F. No visitors shall be allowed in the Work Area, except as authorized by Owner. Provide authorized visitors with suitable respirators with fresh cartridges, depending on phase of operation, whenever they are required to enter the Work Area, to a maximum of two per day.
- G. If the Contractor uses Type "C" air supplied respirators, one open airline shall be maintained as an emergency reserve at all times. Removal of a worker to provide this line will not be acceptable.
- H. Provide workers with sufficient sets of disposable Tyvek, or comparable, protective full body clothing. Such clothing shall consist of full body coveralls, footwear and headgear or one-piece coveralls. Provide eye protection and hard hats as required by applicable safety regulations. Reusable type protective clothing and footwear intended for reuse shall be left in the Contaminated Equipment Room until the end of the asbestos abatement work at which time such items shall be disposed of as asbestos-contaminated waste. Disposable clothing shall not be allowed to

accumulate and shall be disposed of as asbestos-contaminated waste.

- I. Provide authorized visitors with suitable protective clothing, headgear, footwear, and gloves as described above whenever they are required to enter the Work Area.

3.03 GENERAL REMOVAL PROCEDURES

A. SIGNAGE

1. Post signs in and around the project area as required to comply with OSHA regulation 8 CCR Section 1529 and all other Federal, State, and local regulations.
2. Place caution tape and construction signs around the perimeter or at access to the project area as appropriate to keep out unauthorized personnel.

B. WORK AREA PREPARATION

1. Removal of asbestos containing piping insulation and tank insulation as Class I work.
 - a. Before commencing with setup, contractor shall have specifications and project plans on-site, area will be secured with asbestos warning signs per OSHA regulation 29 CFR 1926.1101, and barrier tape to the Owner's Representative's satisfaction.
 - b. Remove from the Work Area all movable items such as furniture, tools, equipment, and miscellaneous items and store in area designated by the Owner.
 - c. Establish an enclosure as the Work Area. Seal with 2 layers of 6-mil plastic sheeting and tape all vents, HVAC ports, windows, and other penetrations into the Work Area.
 - d. Install at a minimum one layer of 6-mil plastic sheeting on the floor of the Work Area.
 - e. Equip the Work Area with negative pressure by installing sufficient number of negative air machine(s). The Work Area shall maintain a negative pressure of -0.02 inch of water throughout the abatement work.
 - f. The Work Area shall be equipped with a three-stage

personnel decontamination unit, which consists of an Equipment Room, a Shower, and a Clean Room as required in OSHA regulation 29 CFR 1926.1101.

- g. Install a view port(s) in accordance with Bay Area Air Quality Management District's requirements.
- 2. Removal of friable miscellaneous Asbestos-Containing Materials as Class II work. Friable ACM in this section includes materials that are naturally friable or will be rendered friable during removal.
 - a. Before commencing with setup, contractor shall have specifications and project plans on-site, area will be secured with asbestos warning signs per OSHA regulation 29 CFR 1926.1101, and barrier tape to the Owner's Representative's satisfaction.
 - b. Remove from the Work Area all movable items such as furniture, tools, equipment, and miscellaneous items and store in area designated by the Owner.
 - c. Establish an enclosure as the Work Area. Seal with a minimum of 6-mil plastic sheeting and tape all vents, HVAC ports, windows, and other penetrations into the Work Area.
 - d. Install poly sheeting dropcloth below areas to be abated.
 - e. Equip the Work Area with negative pressure by installing sufficient number of negative air machine(s).
 - f. Install a view port(s) in accordance with Bay Area Air Quality Management District's requirements.
- 3. Removal of non-friable miscellaneous Asbestos-Containing Materials as Class II work.
 - a. Before commencing with setup, contractor shall have specifications and project plans on-site, area will be secured with asbestos warning signs per OSHA regulation 29 CFR 1926.1101, and barrier tape to the Owner's Representative's satisfaction.
 - b. Remove from the Work Area all movable items such as furniture, tools, equipment, and miscellaneous items and store in area designated by the Owner.
 - c. Establish an isolated Work Area by cordoning off the

boundaries with caution tape or physical barriers. Seal with a minimum of 6-mil plastic sheeting and tape all vents, HVAC ports, and other penetrations inside the Work Area.

- d. Install poly sheeting dropcloth below areas to be abated.

C. REMOVAL OPERATIONS

1. Removal of Asbestos-Containing Materials shall be performed inside one of the above regulated Work Areas, following the steps below.
 - a. Before beginning removal of ACM, thoroughly wet ACM with amended water.
 - b. Don appropriate PPE in accordance with OSHA regulation 29 CFR 1926.1101.
 - c. Continue to mist area while removing ACM to minimize dust or fiber release.
 - d. Use of handheld tools for removal when feasible; use of power tools for ACM removal shall first be approved by the Owner's Representative.
 - e. Bag all asbestos waste promptly as they are being generated. Do not allow asbestos waste to accumulate in the Work Area.
 - f. Load waste bags to the designated storage area along the load out path approved by the Owner.
 - g. Following the gross removal of ACM, detail clean the Work Area using HEPA vacuum and wet wiping.
 - h. Dispose of ACM debris and all plastic sheeting (critical barriers, enclosure, etc.) as asbestos waste. Friable asbestos debris and plastic sheets contaminated with friable asbestos debris shall be disposed of as hazardous asbestos waste.

3.04 INSPECTION PROCEDURE/WORK AREA CLEARANCE

- A. A visual inspection may be performed by the Owner's Representative following abatement to determine the presence of any remaining asbestos-containing material debris.

- B. Air clearance samples may be collected from the Work Areas. If air samples are collected by the Owner's Representative, the clearance level is 0.01 f/cc, which is based on the AHERA PCM clearance level.
- C. If the Work Area is not visibly clean or if air sample results indicate Work Area is not adequately clean, the Contractor will re-clean using HEPA vacuums and wet wiping. Additional air samples will be collected after re-cleaning and subject to same clearance levels stated in Section 3.04(B). Contractor shall bear all additional costs due to failure of visual and/or air clearance testing.
- D. The contractor shall be released only after all Work Areas have been cleared according to the above criteria and accepted by the Owner.

3.05 WASTE DISPOSAL/STORAGE

- A. All disposal of asbestos containing, asbestos contaminated, and/or non-hazardous waste will be coordinated and paid for by Contractor.
- B. All friable ACM debris and items contaminated by friable ACM debris shall be disposed of as hazardous asbestos waste.
- C. The Contractor shall line the bin with a minimum of 6-mil plastic sheeting on the floor and sides of the bin sealed to provide a water-tight membrane.
- D. Affix proper labels per EPA and OSHA requirements. Contractor shall provide appropriate generator waste labels. Contractor shall maintain a running and final count of containers deposited into each waste bin.
- E. Each waste load must be accompanied by an Asbestos Waste Manifest and any other certificate required by state or local agencies. Copies of all Asbestos Waste Manifests shall be provided to the Owner.
- F. The Contractor shall be responsible for the safe handling and transportation of all waste generated by this contract to the designated waste disposal sites. The Contractor shall bear all costs for all claims, damages, losses and expenses against the Owner or the Owner's Representatives, including but not limited to attorney's fees arising out of or resulting from spills en route to the waste disposal site.

3.07 STOP WORK ORDERS

- A. The Owner and/or Owner's Representative has the authority to stop work if it is determined that conditions or procedures are not in compliance with this Work Plan and/or applicable regulations; the Contractor is deficient in

providing required submittals; the waste is not securely stored; or a potential release of asbestos fibers to outside the Work Area is imminent based on the Owner's and/or Owner's Representative's judgment.

- B. The work stoppage shall remain in effect until conditions have been corrected and corrective measures have been taken to the satisfaction of the Owner's and/or Owner's Representative.

END OF SECTION

Appendix 1: Pre-Demolition Survey Report



July 30, 2021

Pre-Demolition Survey Report

Asbestos and Lead Survey Report

**C-4016 Increment 3: Physical
Sciences & Biology Buildings
Demolition Project
2600 Mission Bell Drive
San Pablo, California 94806**

Contract No. B0010039

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Appendix A: Results Summary Tables and Laboratory Analytical Reports

Appendix B: Sample Location Diagram

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Appendix D: FACS Personnel Certifications



Executive Summary

Forensic Analytical Consulting Services, Inc. (FACS) was retained by Contra Costa Community College District (District) to perform a pre-demolition asbestos, lead, and polychlorinated biphenyls (PCB) survey of six (6) structures located on the Contra Costa Community College campus at 2600 Mission Bell Drive, in San Pablo, California. The six structures include the Chemical Storage Building, Biological Science Building, Boiler Room Building, Physical Science Building North, Physical Science Building South and Chiller Unit.

This survey was limited to suspect asbestos-, lead-, and PCB-containing materials that will be disturbed during the demolition of the buildings. The survey was performed between May 24, 2021 and July 2, 2021. This report presents the findings of the pre-demolition asbestos and lead survey and includes a summary of the visual inspection for PCB-containing light ballasts. Suspect PCB-containing bulk samples results will be presented in a different report at a later date.

A list of all suspect asbestos- and lead-containing materials identified and sampled as part of this survey, along with the corresponding analytical result of each sample, is included in Appendix A of this report.

Asbestos-Containing Materials

The following building materials were identified by laboratory analysis to be asbestos-containing:

Description	Building Material Location
Tan Sheet Flooring and Mastic	Biological Science Building
Gypsum Wallboard / Joint Compound	Biological Science Building
12x12 Blue Speck Floor Tile and Mastic	Biological Science Building
TSI Elbow Pipe Fittings	Biological Science Building
Black Chalkboard	Biological Science Building
Black Countertop	Biological Science Building
Orange Peel Wall Tile on Wallboard with Texture Coat and Joint Compound	Biological Science Building
Tank Insulation	Biological Science Building
White HVAC Vibration Dampener	Biological Science Building
Black Mastic on HVAC Coils Drip Pan	Biological Science Building
White Cloth HVAC Gasket	Biological Science Building
HVAC Seam Mastic / Silver Paint	Biological Science Building
Dark Gray Sealant on Generator Exhaust Duct Fan	Biological Science Building
Exterior Stucco	Biological Science Building

Exterior Concrete	Biological Science Building
Exterior Light Gray Caulk	Biological Science Building
Asbestos Cement Exhaust Flue	Biological Science Building
Exterior Concrete	Boiler Room Building
Exterior Sealant	Boiler Room Building
TSI Pipe Runs and Fittings Insulation	Boiler Room Building
12"x12" Brown with White Specks Floor Tile Over Black Mastic	Physical Sciences Building North
12"x12" Blue with White Streaks Floor Tile Over Black Mastic	Physical Sciences Building North
12"x12" Beige with Gray Streaks Floor Tile Over Black Mastic Over Brown Mastic	Physical Sciences Building North
12"x12" Red Floor Tile Over Black Mastic	Physical Sciences Building North
12"x12" Gray with Black Dots Floor Tile Over Black Mastic	Physical Sciences Building North
Gypsum Wallboard / Joint Compound	Physical Sciences Building North
Wall Texture Large Splotch	Physical Sciences Building North
Wall Texture Orange Peel Splotch	Physical Sciences Building North
White Sink Undercoat	Physical Sciences Building North
Black Lab Table	Physical Sciences Building North
Black Window Caulking	Physical Sciences Building North
9"x9 Tan with Brown Streaks Floor Tile Over Black Mastic	Physical Sciences Building South
12"x12" Beige with Dark Gray and White Floor Tiles over Black Mastic	Physical Sciences Building South
12"x12" Dark gray with White Streaks Floor Tiles over Black Mastic	Physical Sciences Building South
12"x12" Red with Black Streaks Floor Tile over Black and Yellow Mastic	Physical Sciences Building South
12"x12" Light Brown with White Streaks Floor Tile over Yellow Mastic	Physical Sciences Building South
Black Exhaust System Tabletop	Physical Sciences Building South
Gray Exhaust System Panel	Physical Sciences Building South
Black Exhaust System Panel	Physical Sciences Building South

White Insulation Packing	Physical Sciences Building South
Gypsum Wallboard / Joint Compound	Physical Sciences Building South
Off White Transite Pipe Fitting	Physical Sciences Building South
Pipe Penetration Tape and Insulation	Physical Sciences Building South
Exhaust Hood	Physical Sciences Building South
White Transite Pipe	Physical Sciences Building South
Pipe Penetration Tape and Insulation	Physical Sciences Building South
Exterior White Window Caulking	Physical Sciences Building South
Exterior Off-White Expansion Joint	Physical Sciences Building South
Exterior Black Caulking	Physical Sciences Building South
Roof Flashing	Physical Sciences Building South
Exterior Gray Sealant	Physical Sciences Building South

Lead-Containing Materials:

The following paints were identified by laboratory analysis to contain detectable amounts of lead:

Description	Lead Content Weight % or PPM	Sample Location
Orange Paint on Gypsum Wallboard	0.33%	Biological Science Building
Beige Paint on Gypsum Wallboard	0.14%	Biological Science Building
Off-White Paint on Plaster	0.38%	Biological Science Building
Black Paint on Metal Beam	0.75%	Biological Science Building
White Paint on Wood Trim	0.035%	Biological Science Building
Blue Paint on Wood	0.037%	Biological Science Building
Off-White Paint on Wood	0.21%	Biological Science Building
Beige Paint on Metal	0.016%	Biological Science Building
Yellow Paint on Metal Support Post	0.037%	Biological Science Building
Red Paint on Metal Pipe Valve	0.022%	Biological Science Building
Gray Paint on Metal Exhaust Flue	180,000 ppm	Biological Science Building
White Paint on Stucco	0.0073%	Biological Science Building
White Paint on Metal	0.023%	Biological Science Building

Description	Lead Content Weight % or PPM	Sample Location
Beige Paint on Metal	2.9%	Biological Science Building
Brown Paint on Metal	0.063%	Biological Science Building
Black Paint on Metal	0.28%	Biological Science Building
White Paint on Wood	0.82%	Biological Science Building
White Paint on Metal	<0.0081%	Biological Science Building
Grey Metal Chiller Component	0.88%	Chiller Unit
Light Orange Paint on Plaster	0.96%	Physical Sciences Building South
Off-White Paint on Plaster	0.10%	Physical Sciences Building South
Orange Paint on Plaster	1.9%	Physical Sciences Building South
Dark Blue Paint on Drywall	0.11%	Physical Sciences Building South
Brown Paint on Metal	0.38%	Physical Sciences Building South
Baby Blue Paint on Metal	0.32%	Physical Sciences Building South
Brown Paint on Plaster	0.26%	Physical Sciences Building South
Black Paint on Glass	0.012%	Physical Sciences Building South
Red Paint on Metal	0.029%	Physical Sciences Building South
Off-White Paint on Metal	0.039%	Physical Sciences Building South
Off-White Paint on Drywall	0.32%	Physical Sciences Building South
Green Paint on Metal Window Frame	5.5%	Physical Sciences Building South
Green Paint on Wood Wall	0.090%	Physical Sciences Building South
Baby Blue Paint on Wood Baseboard	0.57%	Physical Sciences Building South
Brown Paint on Wood Baseboard	0.97%	Physical Sciences Building South
Off-White Paint on Wood Baseboard	0.29%	Physical Sciences Building South
Light Brown Paint on Wood Cabinet	0.013%	Physical Sciences Building South
Dark Blue Paint on Metal Door Frame	0.34%	Physical Sciences Building South
Black Paint on Metal Door	0.11%	Physical Sciences Building South
Orange Paint on Metal HVAC Unit	8.5%	Physical Sciences Building South
Light Orange Paint on Transite Exhaust Hood	0.47%	Physical Sciences Building South
Dark Blue Paint on Transite Exhaust Hood	0.020%	Physical Sciences Building South
Dark Brown Paint on Metal Post	3.2%	Physical Sciences Building South
White Paint on Stucco Wall	0.19%	Physical Sciences Building South
Brown Paint on Metal Door	2.5%	Physical Sciences Building South

Description	Lead Content Weight % or PPM	Sample Location
Blue Paint on Metal Post	0.008%	Physical Sciences Building South
Pink Paint on Concrete Wall	0.11%	Boiler Room Building
Brick Red Paint on Metal Door	1.4%	Boiler Room Building
Brick Red Paint on Metal Pipe	1.2%	Boiler Room Building
Ferrari Red Paint on Metal Pipe Flange	0.078%	Boiler Room Building
Yellow Paint on Metal Pipe	0.019%	Boiler Room Building
Blue Paint on Thermal System Insulation	0.18%	Boiler Room Building
Blue Paint on Metal Door Frame	1.4%	Boiler Room Building
Gray Paint on Pipe	0.007%	Boiler Room Building
Gray Paint on Pedestal	0.19%	Boiler Room Building
Gray Paint on Metal Handrail	0.089%	Physical Sciences Building North
Red Paint on Metal Duct	0.032%	Physical Sciences Building North
Black Paint on Metal Door Frame	0.32%	Physical Sciences Building North
White Paint on Metal Door Frame	0.032%	Physical Sciences Building North
Yellow Paint on Metal Fixture	1.9%	Physical Sciences Building North
Brown Paint on Metal Door Frame	0.20%	Physical Sciences Building North
Red Ceramic Wall Tile	0.008%	Physical Sciences Building North
Yellow Paint on Drywall	0.034%	Physical Sciences Building North
Red Paint on Metal Beam	0.028%	Physical Sciences Building North
Brown Paint on Metal Rail	0.12%	Physical Sciences Building North
Black Paint on Metal Door	0.018%	Physical Sciences Building North

PCB-Containing Light Ballasts and Fluorescent Light Tubes:

Three hundred sixty-five (365) suspect PCB-containing ballasts and seven hundred twenty-five (725) fluorescent light tubes were identified within the buildings.

FACS recommends that the results of this report be incorporated into the demolition plans for the building. In addition, the removal of any of the above-referenced materials should be conducted by an appropriately California licensed and registered contractor. A more complete discussion of findings, conclusions, and recommendations is provided below.

Introduction

Contra Costa Community College District retained FACS to perform a pre-demolition survey for asbestos-, lead-, and PCB-containing materials for the commercial building located at the above-referenced address. Sampling was performed between May 24, and July 2, 2021. This report presents

the findings of the pre-demolition asbestos and lead survey and includes a summary of the visual inspection for PCB-containing light ballasts.

Site Characterization

The Survey includes six (6) structures located on Contra Costa College Campus, 2600 Mission Bell Drive, San Pablo, California. The six structures include the Chemical Storage Building, Biological Science Building, Boiler Room Building, Physical Science Building North, Physical Science Building South, and Chiller Unit. The structures are in the northeast section of the campus. Demolition is planned for all six (6) structures.

The Physical Science Building North and Physical Science Building South are attached and known collectively as the Physical Science Building. Both building have different entrances and the Physical Science Building North has a later construction date. For the purpose of this survey, we have defined the Physical Science Building as two separate buildings. Both buildings and the Biological Science Building are currently in use as classroom buildings.

The Boiler Room Building, Chemical Storage Building, and Chiller Unit are currently in use as support services to the Physical Science Building and Biological Science Building. These structures are not accessible to students and the general public.

Scope of Work

Asbestos

The asbestos survey was conducted by personnel accredited as asbestos inspectors under the federal Environmental Protection Agency (EPA) Asbestos Hazard Emergency Response Act (AHERA) and certified by the California Division of Industrial Relations, Department of Occupational Safety and Health (Cal/OSHA) as an Asbestos Consultant (CAC) and a Site Surveillance Technician (SST). FACS representatives Martin Alvarez, Peter Radzinski, Certified Asbestos Consultants (CAC# 98-2382 and 15-5571), Anthony Aguilar, and Jim Sevilla, Site Surveillance Technicians (SST# 19-6525 and 19-6720), conducted the asbestos survey. FACS employee certifications are included in Appendix D.

The scope of the survey and the services provided by FACS included:

- Performing a visual inspection of the buildings to identify accessible suspect asbestos-containing building materials (ACBMs);
- Collecting and analyzing bulk samples of suspect building materials for asbestos content;
- Ensuring the technical quality of all work by using Asbestos Hazard Emergency Response Act (AHERA) accredited Inspectors and Management Planners and Cal/OSHA certified asbestos personnel;
- Consolidating data and findings into a report format.

Materials to be disturbed by the project and suspected of containing asbestos were sampled in accordance with the federal EPA AHERA protocols. Suspect materials were grouped and classified as homogeneous materials based on their color, texture, and time of construction (i.e., similar appearing materials in different construction phases of a building are classified as separate materials). For any suspect materials determined to be impacted by the project, samples representative of the materials were collected. Materials determined by the inspector to be non-suspect, such as wood, metal, glass, and fiberglass insulation, were not sampled.

Samples were collected in such a manner as to minimize release of the material into the surroundings. Material type, sample number, sample location, and other pertinent information were recorded at the time of

sampling. Each sample was placed in an airtight container labeled with a unique sample number and submitted to SGS Forensic Laboratories (SGS), in Hayward California and Micro Analytical Laboratories, Inc. (MAL) in Emeryville, California for analysis. Samples were analyzed in accordance with EPA Method 600/R-93-116, using polarized light microscopy (PLM) with dispersion staining and using visual area estimation to determine percent asbestos content. This method allows for the identification of the primary types of asbestos used in building materials. The lower limit of detection for this method is one percent. Samples containing less than one-percent asbestos by this PLM method are reported as Trace.

Lead

The lead survey was conducted by personnel certified for lead-related construction consulting work by the California Department of Public Health (CDPH). FACS representatives Martin Alvarez, a CDPH Certified Inspector Assessor (LRC-00001062), Peter Radzinski, Anthony Aguilar, and Miguel Coyotl, CDPH Certified Sampling Technicians (LRC-00002184, LRC-00001334 and LRC-00002983), conducted the lead survey.

The lead survey was limited to prevalent and predominant paints within the interior and exterior of the buildings. The purpose of the lead testing was to provide information to assist the contractor in compliance with various regulatory requirements during the demolition. Since this paint chip survey sampled only representative components and not every individual component, the lead results are assumed to be the same on like components in the same general area of the representative component that was sampled.

All of the suspect lead paint samples were analyzed by MAL and SGS using atomic absorption spectrometry (Flame AAS) in accordance with EPA SW-846 Method 7420 and 3050B/7000B. The detection limit is determined by factors including the size and matrix of each individual sample.

Paint containing lead greater than 0.5% lead by weight (or 5,000 ppm) is considered lead-based paint by CDPH and the EPA, which regulate the disturbance of lead-based paint. Paint with any detectable level of lead is considered lead-containing paint by Cal/OSHA and is regulated under Title 8 California Code of Regulations (CCR) Section 1532.1, Lead in Construction Standard.

PCB-Containing Light Ballasts

California DTSC and the U.S. EPA regulate the use, handling, and disposal of polychlorinated biphenyls (PCBs). PCBs were used in the manufacture of a variety of electrical equipment and components. Until the late 1970s, fluorescent light fixture ballasts often contained regulated concentrations of PCBs.

In the 1970s federal legislation was enacted that prohibited the manufacture and use of PCBs in general; however, almost all fluorescent light fixture ballasts manufactured through 1979 are assumed to have contained PCBs. Ballasts manufactured after 1979 that did not contain PCBs were required to be labeled "No PCBs" or "PCB-free." Any ballast not containing a label indicating "No PCBs" or "PCB-free" should be assumed to contain regulated quantities of PCBs and handled in accordance with applicable laws and regulations. Disposal of such ballasts must be managed as a hazardous waste.

Beginning in 1979, lighting ballast manufacturers prohibited from using PCBs began substituting the substance Di(2-ethylhexyl)phthalate or DEHP. DEHP-containing fluorescent lighting ballasts were produced until approximately 1991, when dry-type ballasts became the industry standard. Although DEHP is recognized as a hazardous substance, neither the U. S. EPA nor DTSC currently regulates DEHP-containing lighting ballasts as hazardous waste. Free-liquid DEHP, as might result from a leaking or drained ballast, is regulated as a hazardous waste.

During this survey, FACS noted the presence of fluorescent light fixtures throughout the buildings. FACS did not visually inspect the ballasts, but rather documented the presence of such fixtures. Based on the age of construction, the ballasts should be assumed to be PCB-containing. However, any lighting fixture ballasts displaying a label indicating they contain “No PCBs” or are “PCB Free” should be assumed to contain DEHP and be recycled according to applicable state and federal regulations.

Asbestos Survey Methodology

Performing an asbestos survey prior to commencement of any demolition and renovation is regulated by the local air quality district. In the San Francisco Bay Area, an asbestos survey is required regardless of the building’s construction date. This asbestos survey was performed in accordance with the Bay Area Air Quality Management District (BAAQMD) Regulation 11, Rule 2.

BAAQMD and Cal/OSHA recognize material with more than one-percent (1%) asbestos to be asbestos-containing material (ACM). However, Cal/OSHA also requires notification and registration of the contractor when working with materials containing more than one-tenth of one percent (0.1%) asbestos, and requires worker protection and specified work practices whenever materials containing any detectable levels of asbestos are to be disturbed.

Our investigation consisted of the following:

- Visual inspection;
- Collection of samples of suspect ACM using the AHERA Survey protocol;
- Submitting samples to MAL and SGS for analysis by Polarized Light Microscopy (PLM). MAL and SGE are accredited by the American Industrial Hygiene Association (AIHA) and by the NIST National Volunteer Laboratory Accreditation Program (NVLAP) for asbestos sample analysis; and
- Presenting analytical results, conclusions, and recommendations in a report that can be submitted to the BAAQMD.

The suspect ACMs were sampled using a knife or other similar coring device suitable to the type of material sampled to cut through its entire thickness and to ensure that a cross-section of the material was obtained. The sample was then placed in an appropriately labeled container, which was sealed and submitted to the laboratory following appropriate chain-of-custody procedures.

The types, number, and locations of samples were determined based on available information about the subject project provided to FACS, visual observations, regulatory requirements, and other project management considerations.

Lead Survey Methodology

This survey was conducted by paint chip sampling. The paint chip samples were collected using a sharp scraper to remove all layers of paint down to the substrate material, taking care not to include the substrate in the sample. The sample was then placed in an appropriately labeled container, which was sealed and submitted to the laboratory following appropriate chain-of-custody procedures. The detection limit is determined by factors including the size and matrix of each individual sample.

The lead survey was intended to assist the District for compliance with Cal/OSHA worker protection requirements. *The lead survey was not a comprehensive lead-based paint survey as detailed in the "Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing" by The National Center for Lead-Safe Housing for HUD.*

Our investigation consisted of the following:

- Visual inspection;
- Collection of samples of suspect lead-containing paint;
- Submitting samples to MAL and SGS for analysis by atomic absorption spectrometry (Flame AAS) in accordance with EPA SW-846 Method 7420 and 3050B/7000B. MAL and SGS are accredited by the AIHA Environmental Lead Laboratory Accreditation Program (ELLAP) and by the CDPH for lead analysis; and
- Presenting analytical results, conclusions, and recommendations in a report.

The types, number, and locations of samples were determined based on available information about the subject project provided to FACS, visual observations, regulatory requirements, and other project management considerations.

PCB Ballasts Survey Methodology

During this survey, FACS inspected the subject building for the presence of fluorescent light ballasts. The approximate number of ballasts, as well as fluorescent light tubes, are documented and presented in this report.

Asbestos Sampling and Analysis

FACS collected a total of three hundred ninety (390) suspect asbestos bulk samples of one hundred eighty-nine (189) suspect homogeneous materials from the project area. The detailed laboratory report and completed bulk sample request form (chain of custody) are contained in Appendix A. A floor plan identifying the sample locations can be found in Appendix B.

Lead Paint Sampling and Analysis

FACS collected ninety-one (91) paint chip samples and four (4) ceramic tile samples from the project area. The samples were submitted to MAL and SGS for analysis by Flame AAS in accordance with EPA SW-846 Method 7420 and 0350B/7000B. The detailed laboratory report and completed paint sample request form (chain of custody) are contained in Appendix A. A floor plan identifying the sample locations can be found in Appendix B.

Findings and Recommendations

Asbestos Survey Results

The table below presents a summary of the findings for each of the asbestos-containing materials identified in this survey.

Table 1. Asbestos Survey Results C-4016 Increment 3: Physical Sciences & Biology Buildings Demolition Project 2600 Mission Bell Drive San Pablo, California 94806				
Material	Location	Asbestos Content	Estimated Quantity	Regulatory Classification
Tan Sheet Flooring and Mastic	Biological Science Building	Sheet Flooring: ND Mastic: 25% Chrysotile Asbestos	18,380 sf	CAT 1 Non-Friable
Gypsum Wallboard / Joint Compound	Biological Science Building	Drywall: ND Joint Compound: 2% Chrysotile Tape/Paint: ND	41,000 sf	RACM
12x12 White / Blue Speck Floor Tile and Mastic	Biological Science Building	Floor Tile: ND Mastic: 2% Chrysotile Asbestos Debris/Dust: ND	3,100 sf	CAT 1 Non-Friable
TSI Elbow Pipe Fittings	Biological Science Building	5% Chrysotile Asbestos	1,100 ea	RACM
Black Chalkboard	Biological Science Building	20% Amosite Asbestos 5% Chrysotile Asbestos	85 ea	CAT 2 Non-Friable
Black Countertop	Biological Science Building	35% Chrysotile Asbestos	120 ea	CAT 2 Non-Friable
Orange Peel Wall Tile on Wallboard with Texture Coat and Joint Compound	Biological Science Building	Drywall: ND Joint Compound: 3% Chrysotile Asbestos Tape: ND Paint: ND	8,000 sf	RACM
Tank Insulation	Biological Science Building	20% Amosite Asbestos 5% Chrysotile Asbestos	150 sf	RACM
White HVAC Vibration Dampener	Biological Science Building	40% Chrysotile Asbestos	16 ea	RACM
Black Mastic on HVAC Coils Drip Pan	Biological Science Building	15% Chrysotile Asbestos	80 sf	CAT 1 Non-Friable
White Cloth HVAC Gasket	Biological Science Building	80% Chrysotile Asbestos	16 ea	RACM
HVAC Seam Mastic / Silver Paint	Biological Science Building	Mastic: ND Paint (Silver): 8% Chrysotile Asbestos Mesh: ND	70 lf	CAT 1 Non-Friable
Dark Gray Sealant on Generator Exhaust Duct Fan	Biological Science Building	2% Chrysotile Asbestos	5 lf	CAT 1 Non-Friable
Exterior Stucco	Biological Science Building	Stucco: ND Skim Coat: <1% Chrysotile	130 sf	CAT 2 Non-Friable
Exterior Concrete	Biological Science Building	2% Chrysotile Asbestos	20 sf	CAT 2 Non-Friable
Exterior Light Gray Caulk	Biological Science Building	2% Chrysotile Asbestos	5,200 lf	CAT 1 Non-Friable
Asbestos Cement Exhaust Flue	Biological Science Building	Assumed Asbestos Material	20 sf	CAT 2 Non-Friable

Table 1. Asbestos Survey Results C-4016 Increment 3: Physical Sciences & Biology Buildings Demolition Project 2600 Mission Bell Drive San Pablo, California 94806				
Material	Location	Asbestos Content	Estimated Quantity	Regulatory Classification
Exterior Concrete	Boiler Room Building	Trace Chrysotile	200 sf	CAT 2 Non-Friable
Exterior Sealant	Boiler Room Building	Trace Chrysotile	20 sf	CAT 1 Non-Friable
TSI Pipe Runs and Fittings Insulation	Boiler Room Building	3% Chrysotile 10-15% Amosite	900 lf	RACM
12"x12" Brown with White Specks Floor Tile Over Black Mastic	Physical Sciences Building North	Tile: ND Mastic: 5% Chrysotile Asbestos	900 sf	CAT 1 Non-Friable
12"x12" Blue with White Streaks Floor Tile Over Black Mastic	Physical Sciences Building North	Tile: ND Mastic: 5% Chrysotile Asbestos	20 sf	CAT 1 Non-Friable
12"x12" Beige with Gray Streaks Floor Tile Over Black Mastic Over Brown Mastic	Physical Sciences Building North	Tile: ND Mastic: 5% Chrysotile Asbestos	20 sf	CAT 1 Non-Friable
12"x12" Red Floor Tile Over Black Mastic	Physical Sciences Building North	Tile: ND Mastic: 5% Chrysotile Asbestos	20 sf	CAT 1 Non-Friable
12"x12" Gray with Black Dots Floor Tile Over Black Mastic	Physical Sciences Building North	Tile: ND Mastic: 5% Chrysotile Asbestos	20 sf	CAT 1 Non-Friable
Gypsum Wallboard / Joint Compound	Physical Sciences Building North	Wallboard: ND Joint Compound: 2% Chrysotile Asbestos Tape: ND Paint: ND	18,000 sf	RACM
Wall Texture Large Splotch	Physical Sciences Building North	Texture: 2% Chrysotile Asbestos Paint: ND	5,000 sf	RACM
Wall Texture Orange Peel Splotch	Physical Sciences Building North	Texture: 2% Chrysotile Asbestos Paint: ND	100 sf	RACM
White Sink Undercoat	Physical Sciences Building North	Coating: 2% Chrysotile Asbestos	15 sf	CAT 1 Non-Friable
Black Lab Table	Physical Sciences Building North	10% Chrysotile Asbestos	150 sf	CAT 2 Non-Friable
Black Window Caulking	Physical Sciences Building North	2% Chrysotile	150 lf18	CAT 2 Non-Friable
9"x9 Tan with Brown Streaks Floor Tile Over Black Mastic	Physical Sciences Building South	Tile: 5% Chrysotile Mastic: 5% Chrysotile	600 sf	CAT 1 Non-Friable

Table 1. Asbestos Survey Results
C-4016 Increment 3: Physical Sciences & Biology Buildings Demolition Project
 2600 Mission Bell Drive
 San Pablo, California 94806

Material	Location	Asbestos Content	Estimated Quantity	Regulatory Classification
12"x12" Beige with Dark Gray and White Floor Tiles over Black Mastic	Physical Sciences Building South	Tile: ND Mastic: 5% Chrysotile	150 sf	CAT 1 Non-Friable
12"x12" Dark Gray with White Streaks Floor Tiles over Black Mastic	Physical Sciences Building South	Tile: 3% Chrysotile Mastic: 5% Chrysotile	1,760 sf	CAT 1 Non-Friable
12"x12" Red with Black Streaks Floor Tile over Black and Yellow Mastic	Physical Sciences Building South	Tile: ND Mastic: 5% Chrysotile	20sf	CAT 1 Non-Friable
12"x12" Light Brown with White Streaks Floor Tile over Yellow Mastic	Physical Sciences Building South	Tile: 2% Chrysotile Mastic: ND	20 sf	CAT 1 Non-Friable
Black Exhaust System Tabletop	Physical Sciences Building South	10% Chrysotile Asbestos	200 sf	CAT 2 Non-Friable
Gray Exhaust System Panel	Physical Sciences Building South	10% Chrysotile Asbestos	200 sf	CAT 2 Non-Friable
Black Exhaust System Panel	Physical Sciences Building South	10% Chrysotile Asbestos	200 sf	CAT 2 Non-Friable
White Insulation Packing	Physical Sciences Building South	10% Amosite Asbestos 5% Chrysotile Asbestos	50 sf	RACM
Gypsum Wallboard / Joint Compound	Physical Sciences Building South	Drywall: ND Joint Compound: 2% Chrysotile	1,250 sf	RACM
Off White Transite Pipe Fitting	Physical Sciences Building South	10% Chrysotile Asbestos 5% Crocidolite	10 sf	RACM
Pipe Penetration Tape and Insulation	Physical Sciences Building South	10% Amosite 2% Chrysotile	5 lf	RACM
Exhaust Hood	Physical Sciences Building South	10% Chrysotile	600 sf	CAT 2 Non-Friable
White Transite Pipe	Physical Sciences Building South	10% Chrysotile 2% Crocidolite	40 sf	RACM
Pipe Penetration Tape and Insulation	Physical Sciences Building South	10% Chrysotile 2% Crocidolite	20 lf	RACM
Exterior White Window Caulking	Physical Sciences Building South	Trace Chrysotile	100 lf	CAT 2 Non-Friable
Exterior Off-White Expansion Joint	Physical Sciences Building South	5% Chrysotile	150 lf	CAT 1 Non-Friable

Table 1. Asbestos Survey Results C-4016 Increment 3: Physical Sciences & Biology Buildings Demolition Project 2600 Mission Bell Drive San Pablo, California 94806				
Material	Location	Asbestos Content	Estimated Quantity	Regulatory Classification
Exterior Black Caulking	Physical Sciences Building South	5% Chrysotile	1,600 lf	CAT 1 Non-Friable
Roof Flashing	Physical Sciences Building South	40% Chrysotile Asbestos	500 sf	CAT 1 Non-Friable
Exterior Gray Sealant	Physical Sciences Building South	10% Chrysotile	500 lf	CAT 1 Non-Friable
Abbreviations/Acronyms				
ND – No Asbestos Detected				
NA – Not Applicable				
RACM – Regulated Asbestos-Containing Material				
CAT 1 Nonfriable – Category 1 Nonfriable Asbestos-Containing Material				
CAT 2 Nonfriable – Category 2 Nonfriable Asbestos-Containing Material				

Asbestos was detected in the above listed materials collected for this survey:

These results apply to all locations where the materials listed above are present in the project area, not just to the sample locations.

A table summarizing the laboratory analytical results for each of the bulk samples collected and submitted for asbestos analysis can be found in Appendix A of this report. Samples containing less than 10% asbestos (including Trace) must be further analyzed using the point count method to determine asbestos content more accurately or else must be considered >1% asbestos (ACM).

FACS recommends:

1. Develop a specification for removal of ACM prior to disturbance by demolition activities.
2. If other suspect asbestos-containing materials not previously tested are identified/uncovered during demolition activities, those materials must be assumed to contain asbestos or must be sampled accordingly prior to their disturbance.

Lead Survey Results

The table below presents a summary of the lead findings for each of the paints and solder sampled in this survey.

Table 2. Lead Survey Results C-4016 Increment 3: Physical Sciences & Biology Buildings Demolition Project 2600 Mission Bell Drive San Pablo, California 94806		
Material	Lead Content	Location
Biological Science Building		
Orange Paint on Gypsum Wallboard	0.33%	Room 18, Southeast Corner Wall
1"x1" Ceramic Tile Gray with Black Specks	<7.7 ppm	Room 24, Southwest Corner from Countertop
Beige Paint on Gypsum Wallboard	0.14%	Room 26, Southeast Counter
4"x4" Off-White Ceramic Tile	210 ppm	Room 43, Wall

Table 2. Lead Survey Results C-4016 Increment 3: Physical Sciences & Biology Buildings Demolition Project 2600 Mission Bell Drive San Pablo, California 94806		
Material	Lead Content	Location
Off-White Paint on Gypsum Wallboard	<0.0078%	Room 12, Southeast Wall
Off-White Paint on Plaster	0.38%	Room 43, Northeast Corner Wall
Black Paint on Metal Beam	0.75%	Room 33, Center I-Beam
White Paint on Wood Trim	0.035%	Room 37, Corridor Door
Light Blue Paint on Gypsum Wallboard	<0.0081%	Corridor, South End, West Wall
Blue Paint on Wood	0.037%	Corridor, South End, Door 7
Off-White Paint on Wood	0.21%	Room 1, Southwest Adjacent Room to Electrical Beam
Beige Paint on Metal	0.016%	Room 1, Southeast Wall
Blue Paint on Metal	<0.0081	Room 3 Boiler Room, North Side Generator
Yellow Paint on Metal Support Post	0.037%	Room 3 Boiler Room
Red Paint on Metal Pipe Valve	0.022%	Room 3 Boiler Room, South Side
Gray Paint on Concrete	<0.0081%	Room 3 Boiler Room, Floor
Blue Paint on Wood	<0.0081%	Room 3 Boiler Room, South Wall Panel
1"x1" Gray Ceramic Tile	<8.9 ppm	Men's Restroom, Floor
Gray Paint on Metal	180,000 ppm	Roof Exhaust Flue
White Paint on Stucco	0.0073%	Exterior, South Side Soffit
Red Paint on Metal Duct	<0.0079%	Exterior, Southwest Corner, Duct Chase
White Paint on Metal Shade	0.023%	Exterior, West Side, Shade Lower
Beige Paint on Metal Trim	2.9%	Exterior, West Side Wall, Lower Header Trim
Brown Paint on Metal	0.063%	Exterior, Roof, Southwest Corner Parapet Cap
Black Paint on Metal	0.28%	Exterior, West Side I-Beam Column
White Paint on Wood	0.82%	Exterior, West Side Eave Joist
Red Paint on Wood	<0.0081%	Exterior, South Box
White Paint on Metal	<0.0081%	Room 29, Exhaust Hood
Chemical Storage Building		
Grey Paint on Metal Door	<0.007%	Ante-Chamber, Flammables Door
Beige Paint on Wallboard	<0.007%	Ante-Chamber, Wall Between Hazardous and Flammable Storage Doors
Chiller Unit		
Grey Metal Chiller Component	0.88%	Near Entry, Chiller Component

Table 2. Lead Survey Results C-4016 Increment 3: Physical Sciences & Biology Buildings Demolition Project 2600 Mission Bell Drive San Pablo, California 94806		
Material	Lead Content	Location
Physical Sciences Building South		
Baby Blue Paint on Plaster	<0.006%	Physical Sciences Building South, Corridor, South Wall
Light Orange Paint on Plaster	0.96%	Physical Sciences Building South, Room PS-8, West Wall
Off-White Paint on Plaster	0.10%	Physical Sciences Building South, Room PS-17, West Wall
Orange Paint on Plaster	1.9%	Physical Sciences Building South, Room PS-12, South Wall
Dark Blue Paint on Drywall	0.11%	Physical Sciences Building South, Room PS-19, North Wall
Brown Paint on Metal	0.38%	Physical Sciences Building South, Room PS-5, North Wall
Baby Blue Paint on Metal	0.32%	Physical Sciences Building South, Room PS-5, North Wall
Brown Paint on Plaster	0.26%	Physical Sciences Building South, Room PS-2, North Wall
Black Paint on Glass	0.012%	Physical Sciences Building South, Room PS-19, Northwest Wall
Red Paint on Metal	0.029%	Physical Sciences Building South, Room PS-5, Southwest Wall
Off-White Paint on Metal	0.039%	Physical Sciences Building South, Room PS-2, East Wall
Off-White Paint on Drywall	0.32%	Physical Sciences Building South, Room PS-1, South Wall
Green Paint on Metal Window Frame	5.5%	Physical Sciences Building South, Room PS-5, North Wall
Green Paint on Wood Wall	0.090%	Physical Sciences Building South, Room PS-5, North Wall
Baby Blue Paint on Wood Baseboard	0.57%	Physical Sciences Building South, Room PS-6, North Wall
Brown Paint on Wood Baseboard	0.97%	Physical Sciences Building South, Room PS-8, North Wall
Off-White Paint on Wood Baseboard	0.29%	Physical Sciences Building South, Room PS-10, South Wall
Light Brown Paint on Wood Cabinet	0.013%	Physical Sciences Building South, Room PS-6, Cabinet
Dark Blue Paint on Metal Door Frame	0.34%	Physical Sciences Building South, Room PS-19, Room-108
Black Paint on Metal Door	0.11%	Physical Sciences Building South, Room PS-19, Room 108
Orange Paint on Metal HVAC Unit	8.5%	Physical Sciences Building South, Room PS-5, North on Hood

Table 2. Lead Survey Results C-4016 Increment 3: Physical Sciences & Biology Buildings Demolition Project 2600 Mission Bell Drive San Pablo, California 94806		
Material	Lead Content	Location
Light Orange Paint on Transite Exhaust Hood	0.47%	Physical Sciences Building South, Room PS-6, South Side
Dark Blue Paint on Transite Exhaust Hood	0.020%	Physical Sciences Building South, Room PS-14, South Wall
Dark Brown Paint on Metal Post	3.2%	Physical Sciences Building South, Room PS-6, South Wall
White Paint on Stucco Wall	0.19%	Exterior, Physical Sciences Building South, Southeast Area
Brown Paint on Metal Door	2.5%	Exterior, Physical Sciences Building South, North Center Area
Blue Paint on Metal Post	0.008%	Exterior, Physical Sciences Building South, East Center Area
Boiler Room Building		
Pink Paint on Concrete Wall	0.11%	Interior, West Wall, Center
Blue Paint on Metal Transformer	<0.006%	Interior, Transformer Stand, Southwest Corner
Brick Red Paint on Metal Door	1.4%	Interior, Boiler Room, Entry Door, Southwest Area
Brick Red Paint on Metal Pipe	1.2%	Exterior, Boiler Room, Southwest Corner, Pipe
Fire Red Paint on Metal Control Panel	<0.007%	Interior, Boiler Room, South Wall, Control Panel
Ferrari Red Paint on Metal Pipe Flange	0.078%	Interior, Boiler Room, Northwest Corner, Pipe Flange
Yellow Paint on Metal Pipe	0.019%	Interior, Boiler Room, West Wall, Pipe Adjacent to Entry
Blue Paint on Thermal System Insulation	0.18%	Interior, Boiler Room, Southeast Area, Thermal System Insulation on Pipe
Blue Paint on Metal Door Frame	1.4%	Interior, Boiler Room, Northeast Entry, Door Frame
Gray Paint on Pipe	<0.007%	Interior, Boiler Room, Southwest Area Adjacent to Entry
Gray Paint on Pipe	0.007%	Exterior, Boiler Room, Northeast Area, Gas Meter
Gray Paint on Pedestal	0.19%	Interior, Boiler Room, Northeast Area, Pedestal
Physical Sciences Building North		
White Paint on Drywall	<0.007%	Physical Sciences Building North, Room PS-109, West Wall
Gray Paint on Metal Door Frame	<0.006%	Physical Sciences Building North, Room PS-109, Entrance

Table 2. Lead Survey Results C-4016 Increment 3: Physical Sciences & Biology Buildings Demolition Project 2600 Mission Bell Drive San Pablo, California 94806		
Material	Lead Content	Location
Beige Paint on Wood Trim	<0.006%	Physical Sciences Building North, Corridor 1, Above Entrance
Gray Paint on Metal Handrail	0.089%	Physical Sciences Building North, Corridor 1, Center
Red Paint on Metal Duct	0.032%	Physical Sciences Building North, Room PS-113, South
Baby Blue Paint on Drywall	<0.007%	Physical Sciences Building North, Room PS-113, North Wall
Black Paint on Metal Door Frame	0.32%	Physical Sciences Building North, Room PS-123, Door Frame
White Paint on Metal Door Frame	0.032%	Physical Sciences Building North, Room PS-118, Door Frame
Gray Paint on Wood Wall	<0.006%	Physical Sciences Building North, Room PS-118, Wall
White Paint on Wood Trim	<0.006%	Physical Sciences Building North, Room PS-118, Near Ceiling
Yellow Paint on Metal Fixture	1.9%	Physical Sciences Building North, Room PS-113, On Light Fixture
Baby Blue Paint on Wood Trim	<0.006%	Physical Sciences Building North, Room PS-106, North Wall
Brown Paint on Metal Door Frame	0.20%	Physical Sciences Building North, Room PS-106, Door Frame
Black Paint on Drywall	<0.007%	Physical Sciences Building North, Room PS-132 Lecture Hall, Above Ceiling
Brown Ceramic Floor Tile	<0.006%	Physical Sciences Building North, Women's Restroom, South Wall
Red Ceramic Wall Tile	0.008%	Physical Sciences Building North, Women's Restroom, South Wall
Yellow Paint on Drywall	0.034%	Physical Sciences Building North, Room 130, Northwest Corner
Black Paint on Wood Wall	<0.006%	Physical Sciences Building North, Room Exploratorium, 132 Entrance
Red Paint on Metal Beam	0.028%	Physical Sciences Building North, Corridor, Above Ceiling Beam
Brown Paint on Metal Gutter	<0.007%	Physical Sciences Building North, Roof F, West Area
Red Paint on Metal Dome Joint	<0.007%	Physical Sciences Building North, Roof G, Southwest Area
Red Paint on Wood Dome Siding	<0.006%	Physical Sciences Building North, Roof G, Southwest Area
Black Paint on Wood Cabinet Door	<0.007%	Physical Sciences Building North, Roof J, South Area

Table 2. Lead Survey Results C-4016 Increment 3: Physical Sciences & Biology Buildings Demolition Project 2600 Mission Bell Drive San Pablo, California 94806		
Material	Lead Content	Location
Brown Paint on Metal Rail	0.12%	Physical Sciences Building North, Roof J, South Area
Black Paint on Metal Door	0.018%	Physical Sciences Building North, North Area, North Door
Orange Paint on Gypsum Wallboard	0.33%	Room 18, Southeast Corner Wall
1"x1" Ceramic Tile Gray with Black Specks	<7.7 ppm	Room 24, Southwest Corner from Countertop
Beige Paint on Gypsum Wallboard	0.14%	Room 26, Southeast Counter
4"x4" Off-White Ceramic Tile	210 ppm	Room 43, Wall
Off-White Paint on Gypsum Wallboard	<0.0078%	Room 12, Southeast Wall
Abbreviations/Acronyms		
mg/kg – milligrams per kilogram		
ppm – parts per million		
wt% – percent by weight		
mg/cm ² – milligrams per square centimeter		

A detectable concentration of lead was reported in the samples identified in bold text in the table above. All similar paints should be considered to be lead-containing based on these results. All lead-based paint in the project area is considered to contain lead at greater than 0.5% lead by weight.

As required by the California Department of Public Health, Title 17, Article 16 Regulations, dated April 20, 2008, FACS will forward Form 8552 to CDPH notifying them of the presence of LBP in the areas tested at the subject property. A copy of the Form 8552 is contained in Appendix C.

FACS recommends:

1. Current Cal/OSHA regulations (e.g. 8CCR 1532.1 "Lead in Construction" Standard) apply to all construction work where an employee may be occupationally exposed to lead. Therefore, any work performed on a surface containing any amount of lead must comply with this regulation.
2. A lead hazard control plan should be developed for the project.
3. Any paint not represented by a result that is below the analytical limit of detection should be considered to contain lead and be treated as such until proven otherwise.
4. If other suspect lead-containing materials and/or paint not previously tested are encountered during demolition activities, those materials and/or paint must be assumed to contain lead or must be sampled accordingly prior to their disturbance.
5. Building records should indicate that a complete lead hazard evaluation of the buildings was not performed. The lead paint sampling was limited to assisting with Cal/OSHA compliance.

PCB-Containing Light Ballasts and Fluorescent Light Tubes

Three hundred sixty-five (365) suspect PCB-containing ballasts and seven hundred twenty-five (725) fluorescent light tubes were identified within the buildings.

FACS recommends:

1. Based on the age of construction, the light ballasts should be assumed to be PCB-containing.
2. Any lighting fixture ballasts displaying a label indicating they contain “No PCBs” or are “PCB Free” should be assumed to contain DEHP and be recycled according to applicable state and federal regulations.
3. Fluorescent light tubes and thermostat switches typically contain mercury and other metals and their disposal is regulated under the California EPA’s Universal Waste Rules. Fluorescent light tubes should be removed prior to building demolition, should be handled so as to prevent breakage, and, if discarded, should be sent to an appropriately permitted recycler.

Asbestos Regulations

The following is a summary of some current regulations that contain requirements related to building surveys for asbestos, worker protection from asbestos exposure, and asbestos as a hazardous waste. These summaries are not intended to be all-inclusive and do not contain every aspect of the regulations discussed. For detailed regulatory requirements in specific situations, FACS may be consulted, and the applicable regulations should be examined.

Building Survey

US EPA National Emission Standard for Hazardous Air Pollutants (NESHAP), 40 CFR Part 61 and Bay Area Air Quality Management District (BAAQMD) Regulation 11 Rule 2

Under NESHAP’s regulation, no visible emissions are allowed during building demolition or renovation activities that involve regulated asbestos-containing materials (RACM). For this reason, all buildings must be surveyed for ACM prior to demolition or renovation. BAAQMD, which implements NESHAP, must be notified prior to any building demolition even if no ACM are present. BAAQMD must be notified of most renovation projects that disturb RACM. All RACM must be removed from a building prior to demolition. Any disturbance (removal) of RACM during renovation or demolition must be performed according to BAAQMD regulations.

RACM is (a) friable ACM; (b) Category I non-friable ACM that has or will become friable; (c) Category I non-friable ACM that will be or has been subjected to sanding, grinding, cutting, or abrading; or (d) Category II non-friable ACM that may become or has become crumbled, pulverized, or reduced to powder by the forces expected to act on the material in the course of demolition or renovation.

Category I non-friable ACM are asbestos-containing packings, gaskets, resilient floor coverings, mastics, and asphalt roofing products. Category II non-friable ACM is any non-friable material not designated as Category I. Per BAAQMD, these products include transite board, pipe, and asbestos-cement products, plaster, stucco, and paint.

Asbestos Hazard Emergency Response Act (AHERA), 40 CFR Part 763, Subpart E

AHERA requires asbestos surveys and the development of Asbestos Management Plans for all of the nation’s primary and secondary schools. The asbestos survey procedures of AHERA are considered the industry standard and are applied to all surveys performed by FACS unless otherwise specified.

Samples are analyzed in accordance with EPA Method 600/R-93-116, using PLM with dispersion staining and visual area estimation to determine percent asbestos content. This method allows for identifying the primary types of asbestos used in building materials. All layers in a sample must be analyzed and reported separately. Samples (and layers of samples) containing <1 percent asbestos by PLM are reported as Trace. Samples containing <10 percent asbestos (including Trace) must be further analyzed using the point-count method to determine asbestos content more accurately, or be considered >1 percent asbestos (ACM).

Composite sampling, which may potentially reduce the total asbestos content of a material, is only permitted by EPA when sampling joint compound, tape, and gypsum wallboard according to Asbestos NESHAP Clarification Regarding Analysis of Multi-Layered Systems (40 CFR Part 61 FRL-4821-7). OSHA does not recognize composite sampling.

Worker Protection

California Assembly Bill AB3713, Health and Safety Code Division 20, Chapter 10.4, Section 25915-25924

Building owners, employers, lessees, etc., must notify tenants, employees, and contractors of the presence of asbestos in both friable and non-friable forms. Preventive maintenance activities must be developed and communicated to these parties. Notification is required 15 days after the identification of ACM and asbestos-containing construction materials (ACCM, >0.1 percent asbestos) in the building, and annually thereafter.

Occupational Safety and Health Administration (OSHA) 29 CFR 1926.1101 and Cal/OSHA 8 CCR 1529 – Asbestos in Construction

OSHA and Cal/OSHA require employers to implement specific work practices to protect workers from airborne asbestos exposure. Materials that contain any detectable amount of asbestos are regulated by OSHA and Cal/OSHA.

Even building materials that contain low levels of asbestos (<1 percent) can potentially generate significant concentrations of airborne asbestos fibers when disturbed; therefore, control measures should be instituted that adequately address worker health and safety during planned renovation or demolition activities involving these materials.

OSHA requires ACM to be categorized into Thermal System Insulation (TSI), Surfacing Materials, and 'Other' Materials for the purpose of determining job classification for abatement. TSI is ACM applied to pipes, fittings, boilers, breeching, tanks, ducts, or other structural components to prevent heat loss or gain. Surfacing Material is material that is sprayed, troweled, or otherwise applied to surfaces (such as acoustical plaster on ceilings; fireproofing materials on structural members; or other materials applied to surfaces for acoustical, fireproofing, and other purposes). 'Other' materials are all ACM not categorized as TSI or Surfacing Material.

Hazardous Asbestos Waste

US EPA National Emission Standard for Hazardous Air Pollutants (NESHAP), 40 CFR Part 61 and Bay Area Air Quality Management District (BAAQMD) Regulation 11 Rule 2

Hazardous waste in California is regulated by Cal/EPA, Division of Toxic Substances Control (DTSC). In California, friable ACM (>1 percent asbestos) waste is hazardous waste. EPA defines friable ACM waste as asbestos-containing waste but does not consider it to be "hazardous waste". A waste site must be notified of the asbestos content of waste, including non-hazardous asbestos waste, prior to disposal.

Lead Regulations and Guidelines

The following is a summary of some current regulations that contain requirements related to worker protection from lead exposure and some regulations and guidelines related lead waste segregation, characterization, and disposal. These summaries are not intended to be all-inclusive and do not contain every aspect of the regulations discussed. For detailed regulatory requirements in specific situations, FACS may be consulted, and the applicable regulations should be examined.

Worker Protection

Cal/OSHA Lead in Construction Safety Standard (8 CCR 1532.1)

The current Cal/OSHA Lead in Construction Safety Standard (8 CCR 1532.1) regulation applies to all construction work where an employee may be occupationally exposed to lead; therefore, work (including manual demolition, scraping, welding, etc.) performed on surfaces containing any detectable concentration of lead must comply with the standard, including exposure assessment monitoring (personal air sampling) to determine if the airborne lead exposure levels are within acceptable limits.

For work involving a Cal/OSHA “trigger tasks” (such as sanding, cutting, torch cutting, etc.), workers must be protected during the initial exposure assessment, per the Cal/OSHA Lead Standard requirements, as if they were exposed above the Permissible Exposure Limit (PEL) until actual exposures are determined. With torch cutting, for example, this includes providing supplied air respiratory protection during the initial exposure assessment.

Lead Waste Segregation, Characterization, and Disposal

Loose and flaking paints should be scraped down to intact paint (and the resulting paint chips captured for disposal) prior to demolition. Only components with intact, well-adhered paint will then remain during demolition. Ceramic tile with high lead content should also be removed prior to demolition. The owner or removal/demolition contractor should conduct appropriate segregation of waste created during the removal or dismantling/demolition process and dispose of the different waste streams in accordance regulatory requirements based on appropriate testing results.

Lead waste is considered a hazardous waste if the result of the Toxicity Characterization Leaching Procedure (TCLP) test exceeds 5 milligrams per liter (mg/l) (5ppm), under the Resource Conservation and Recovery Act (RCRA), 40 CFR 261, Appendix II. In California, a waste is also considered hazardous if the result of soluble lead content by a Waste Extraction Test (WET) is greater than 5 mg/l, or if the total lead content exceeds 1,000 milligrams per kilogram (mg/kg) in accordance with Title 22 of the CCR. When TTLC results are below 50 mg/kg, STLC/TCLP limits cannot be exceeded, so the waste is classified as general construction debris.

For detailed regulatory requirements in specific situations, FACS may be consulted, and the applicable regulations should be examined.

As required by the California Department of Public Health, Title 17, Article 16 Regulations, dated January 8, 1999, FACS will forward Form 8552 to CDPH notifying them of the absence of lead-based paint in the areas tested at the subject property. The Form 8552 is contained in Appendix C.

1. Any sample not represented by a less than the limit of detection sample result should be considered to contain lead and be treated as such unless proven otherwise.
2. Building records should indicate that a complete lead hazard evaluation of the buildings was not performed. The lead paint sampling was limited to assisting with Cal/OSHA compliance.

Limitations

The results of this survey do not apply beyond the planned demolition described above. Suspect asbestos- and lead-containing materials in areas not included in the scope of this survey should be assumed to be ACM and lead-containing, respectively, unless testing is conducted which determines otherwise. The lead paint sampling was limited only to Cal/OSHA compliance and is not considered to be a complete lead hazard evaluation.

If revisions to the demolition project are made that impact additional materials or areas, FACS should be contacted to review the changes and/or to conduct additional survey work to address potential impact to untested materials.

This investigation is limited to the conditions and practices observed and information made available to FACS. The methods, conclusions and recommendations provided are based on FACS' judgment, expertise and the standard of practice for professional service. They are subject to the limitations and variability inherent in the methodology employed. As with all environmental investigations, this investigation is limited to the defined scope and does not purport to set forth all hazards, nor indicate that other hazards do not exist.

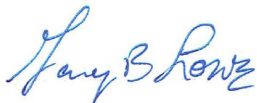
Please do not hesitate to contact our offices at 510-266-4600 with any questions or concerns. Thank you for the opportunity to assist the Contra Costa Community College District in promoting a more healthful environment.

Respectfully,

FORENSIC ANALYTICAL

Reviewed by:

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Appendix A

Results Summary Tables and Laboratory Analytical Reports



Table 3. Summary of Asbestos Analytical Results

C-4016 Increment 3: Physical Sciences & Biology Buildings Demolition Project
2600 Mission Bell Drive
San Pablo, California 94806

Sample Number	Material Description	Asbestos Content	Sample Location
Chemical Storage Building			
CSB-01	White Drywall	White Drywall: ND White Joint Compound: ND White Tape: ND	Flammables Room, Northeast Corner
CSB-02	White Drywall	White Drywall: ND White Joint Compound: ND White Tape: ND	Acid Room, Northeast Corner
CSB-03	Sealant	Black Sealant: ND	Acid Room, Northeast Corner Exhaust Air Duct
CSB-04	Sealant	Black Sealant: ND	Acid Room, Northeast Corner, Exhaust Air Duct
CSB-05	Sealant	White Sealant: ND	Exterior North Side Louvre, West
CSB-06	Sealant	White Sealant: ND	Exterior North Side Louvre, East
CSB-07	Sealant	Brown Sealant: ND	Ante-Chamber, North Entry Jamb to Hazardous Room
CSB-08	Sealant	Brown Sealant: ND	Flammables Room, North Entry Jamb
CSB-09	Mortar	Grey Mortar: ND	Exterior, East of Entry, at Deck
CSB-10	Mortar	Grey Mortar: ND	Exterior, West of Entry
CSB-11	Concrete	ND	Exterior, East of entry
CSB-12	Concrete	ND	Interior, Ante-Chamber, Center at Drainage Grill
CSB-13	Tar and Gravel Roof	Black Tar: ND Black Felt: ND	Roof Field, Northwest Quadrant
CSB-14	Tar and Gravel Roof	Black Tar: ND Black Felt: ND	Roof Field, Southeast Quadrant
CSB-15	Rolled Roofing	Stones: ND Black Tar: ND Black Felt: ND	Parapet and Flashing, Southwest Quadrant
CSB-16	Rolled Roofing	Stones: ND Black Tar: ND Black Felt: ND	Parapet and Flashing, Northeast Quadrant
CSB-17	Grey Sealant	ND	Roof Parapet, Southwest Corner
CSB-18	Grey Sealant	ND	Roof Parapet, Northeast Corner
Chiller Unit			
CE-01	TSI, Straight Run	ND	Northeast Quadrant, North Chiller Line, East End of East- West Run
CE-02	TSI, Straight Run	ND	Northeast Quadrant, North Chiller Line, North End of North- South Run

Table 3. Summary of Asbestos Analytical Results

C-4016 Increment 3: Physical Sciences & Biology Buildings Demolition Project
2600 Mission Bell Drive
San Pablo, California 94806

Sample Number	Material Description	Asbestos Content	Sample Location
CE-03	TSI, Straight Run	ND	Northwest Quadrant, North Chiller Line, East of Valve
CE-04	TSI, Valve Jacket	ND	Northwest Quadrant, North Chiller Line, Valve Jacket
CE-05	TSI	ND	West Side, Pump Manifold
CE-06	Packing	ND	Corrugated Roof Panel and Joist
CE-07	Packing	ND	Corrugated Roof Panel and Joist
CE-08	TSI	ND	Pipe Elbow Above West Pump
CE-09	Concrete	ND	Exterior, Southwest Corner, Pad
CE-10	Concrete	ND	Exterior, Northwest Corner, Pad
Biological Science Building			
BIO-A001	Tan Sheet Flooring	Sheet Flooring: ND Mastic: 25% Chrysotile Asbestos	Room 18, Southeast Corner
BIO-A002	Tan Sheet Flooring	Not Analyzed (Prior Positive)	Room 18, Northwest Corner
BIO-A003	Beige Sheet Flooring	Sheet Flooring: ND Mastic: ND	Room 18, West Side Pothole on Floor
BIO-A004	Beige Sheet Flooring	Sheet Flooring: ND Mastic: ND Concrete: ND	Room 2, East Side
BIO-A005	White Adhesive	ND	Room 16, Metal HVAC Pins
BIO-A006	White Adhesive	ND	Room 16, Metal HVAC Pins
BIO-A007	Gray Seam Mastic	ND	Room 16, HVAC
BIO-A008	Gray Seam Mastic	ND	Room 17, HVAC
BIO-A009	2"x4" White Acoustical Ceiling Tile with Fissure Pattern	Ceiling Tile: ND Paint: ND	Room 18
BIO-A010	2"x4" White Acoustical Ceiling Tile with Fissure Pattern	Ceiling Tile: ND Paint: ND	Corridor East Wall on South End
BIO-A011	Black Floor Mats with Gray Streaks	ND	Room 16
BIO-A012	Black Floor Mats with Gray Streaks	ND	Room 16
BIO-A013	Joint Compound/Drywall	Drywall: ND Joint Compound: 2% Chrysotile Asbestos Tape/Paint: ND	Room 18, Southeast Corner Wall

Table 3. Summary of Asbestos Analytical Results

C-4016 Increment 3: Physical Sciences & Biology Buildings Demolition Project
2600 Mission Bell Drive
San Pablo, California 94806

Sample Number	Material Description	Asbestos Content	Sample Location
BIO-A014	Joint Compound/Drywall	Drywall: ND Joint Compound: 2% Chrysotile Asbestos Tape/Paint: ND	Room 26, Southeast Corner
BIO-A015	Joint Compound/Drywall	Drywall: ND Joint Compound: 2% Chrysotile Asbestos Tape/Paint	Room 3 Boiler Room
BIO-A016	Joint Compound/Drywall	Drywall: ND Joint Compound: 2% Chrysotile Asbestos Tape/Paint	Janitor Closet Next to Room 7
BIO-A017	Brown Baseboard Mastic	ND	Room 18, East Wall
BIO-A018	Brown Baseboard	Mastic: ND	Room 35
BIO-A019	1"x1" Gray Ceramic Tile with Black Specks/Off-White Grout/Off-White Mortar	Ceramic Tile: ND Grout: ND Mortar: ND	Room 24, Counter Top
BIO-A020	1"x1" Gray Ceramic Tile with Black Specks/Off-White Grout/Off-White Mortar	Ceramic Tile: ND Grout: ND Mortar: ND	Room 18
BIO-A021	TSI on 4" Pipe Run	TSI: ND Wrap: ND	Room 22 Northeast Corner
BIO-A022	TSI on 4" Pipe Run	TSI: ND Wrap: ND	Room 22
BIO-A023	TSI on 4" Pipe Run	TSI: ND Wrap: ND	Room 22
BIO-A024	2"x4" White Acoustical Ceiling Tile with Pin Hole Pattern	Ceiling Tile: ND Paint: ND	Room 24
BIO-A025	2"x4" White Acoustical Ceiling Tile with Pin Hole Pattern	Ceiling Tile: ND Paint: ND	Room 39
BIO-A026	12"x12" Floor Tile with Gray Streaks/Yellow Mastic	Floor Tile: ND Mastic: ND	Room 128A
BIO-A027	12"x12" Floor Tile with Gray Streaks/Yellow Mastic	Floor Tile: ND Mastic: ND	Room 128A
BIO-A028	Red Brick and Gray Mortar	Brick: ND Mortar: ND	Room 26, North Wall
BIO-A029	Red Brick and Gray Mortar	Brick: ND Mortar: ND	Exterior, South Entrance
BIO-A030	12"x12" Floor Tile with Blue Specks/Yellow Mastic	Floor Tile: ND Mastic: ND	Corridor, South Side

Table 3. Summary of Asbestos Analytical Results

C-4016 Increment 3: Physical Sciences & Biology Buildings Demolition Project
2600 Mission Bell Drive
San Pablo, California 94806

Sample Number	Material Description	Asbestos Content	Sample Location
BIO-A031	Red Brick and Gray Mortar	Brick: ND Mortar: ND	Exterior, South Entrance
BIO-A032	12"x12" Floor Tile with Blue Specks/Yellow Mastic	Floor Tile: ND Mastic: ND	Corridor, South Side
BIO-A033	12"x12" Floor Tile with Blue Specks/Yellow Mastic	Floor Tile: ND Mastic: 2% Chrysotile Asbestos Debris/Dust: ND	Men's Restroom Vestibule, Northwest Corner
BIO-A034	Green Carpet Mastic	ND	Room 43 Southwest Corner
BIO-A035	Green Carpet	ND	Room 43 Southeast Corner
BIO-A036	Knock Down Wall Tile on Wood Panel Walls	Texture: ND Paint: ND	Corridor, North Side West End
BIO-A037	Knock Down Wall Tile on Wood Panel Walls	Texture: ND Paint: ND	Corridor, East Side Next to Room 37
BIO-A038	Knock Down Wall Tile on Wood Panel Walls	ND	Corridor West, Next to Room 18
BIO-A039	Knock Down Wall Tile on Wood Panel Walls	Texture: ND Paints: ND	Corridor East, Next to Room 13
BIO-A040	Knock Down Wall Tile on Wood Panel Walls	Texture: ND Paints: ND	South End Next to Room 2
BIO-A041	Dark Tan Resilient Sheet Flooring	Sheet Flooring: ND Mastic: ND Concrete Underlayment: ND	Room B-8 Northwest Corner
BIO-A042	Dark Tan Resilient Sheet Flooring	Sheet Flooring: ND Mastic: ND Concrete Underlayment: ND	Room 39 Northwest Corner
BIO-A043	Pipe Elbow on 4" Pipe Run	5% Chrysotile Asbestos	Room 41
BIO-A044	Pipe Elbow on 4" Pipe Run	Not Analyzed (Prior Positive)	Room 17
BIO-A045	Pipe Elbow on 4" Pipe Run	Not Analyzed (Prior Positive)	Room 43
BIO-A046	Plaster	Plaster: ND Skim Coat: ND Paint: ND	West Wall in Washroom
BIO-A047	Plaster	Plaster: ND Skim Coat: ND Paint: ND	North Wall in Study Room
BIO-A048	Plaster	Plaster: ND Skim Coat: ND Paint: ND	Women's Restroom
BIO-A049	Plaster	Plaster: ND Skim Coat: ND Paint: ND	Women's Restroom
BIO-A050	Plaster	Plaster: ND Skim Coat: ND Paint: ND	Men's Restroom

Table 3. Summary of Asbestos Analytical Results

C-4016 Increment 3: Physical Sciences & Biology Buildings Demolition Project
2600 Mission Bell Drive
San Pablo, California 94806

Sample Number	Material Description	Asbestos Content	Sample Location
BIO-A051	4"x4" Off-White Ceramic Wall Tile/Off-White Grout	Ceramic Wall Tile: ND Mortar/Grout: ND	East Wall of Room 43
BIO-A052	4"x4" Off-White Ceramic Wall Tile/Off-White Grout	Ceramic Wall Tile: ND Mortar/Grout: ND	East Wall of Room 43
BIO-A053	Yellow Wall Panel Adhesive	ND	East Wall of Room 43
BIO-A054	Yellow Wall Panel Adhesive	ND	West Wall of Room 43
BIO-A055	Yellow/Beige Baseboard Mastic	ND	Room 26
BIO-A056	Yellow/Beige Baseboard Mastic	ND	Room 2
BIO-A057	Pipe Jacket	Fiberglass: ND Jacket: ND	Room 26, On 6" Outside Diameter Pipe Run
BIO-A058	Pipe Jacket	Fiberglass: ND Jacket: ND	Room 3, On 6" Outside Diameter Pipe Run
BIO-A059	Pipe Jacket	Fiberglass: ND Jacket: ND	Room 1, On 6" Outside Diameter Pipe Run
BIO-A060	Pipe Elbow	20% Amosite Asbestos 5% Chrysotile Asbestos	Room 1, On 6" Outside Diameter Pipe Run
BIO-A061	Pipe Elbow	Not Analyzed (Prior Positive)	Room 2, East Wall, South End Above Door on 6" Outside Diameter Pipe Run
BIO-A062	Pipe Elbow	Not Analyzed (Prior Positive)	Room 43 on 6" Outside Diameter Pipe Run
BIO-A063	Black Chalkboard	20% Chrysotile Asbestos	Room 39
BIO-A064	Black Chalkboard	Not Analyzed (Prior Positive)	Room 39
BIO-A065	White Insulation	ND	Room 24, Sink Pipe Drains
BIO-A066	White Insulation	ND	Room 39, Sink Pipe Drains
BIO-A069	Red Fire Stop	ND	Room 41
BIO-A070	Red Fire Stop	ND	Room 5
BIO-A071	Black Counter Tops	35% Chrysotile Asbestos	Room 39
BIO-A072	Black Counter Tops	Not Analyzed (Prior Positive)	Room 22
BIO-A073	Gray Counter Tops	ND	Room 41, South Wall
BIO-A074	Gray Counter Tops	ND	Room 17
BIO-A075	Orange Peel Wall Tile on Drywall	Texture: 2% Chrysotile Asbestos Paint: ND	Room 2, East Wall North End
BIO-A076	Orange Peel Wall Tile on Drywall	Not Analyzed (Prior Positive)	Room B8, East Wall, South End
BIO-A077	Orange Peel Wall Tile on Drywall	Not Analyzed (Prior Positive)	Room B8, East Wall, North End
BIO-A078	Orange Peel Wall Tile on Drywall	Not Analyzed (Prior Positive)	Room 6, South Wall

Table 3. Summary of Asbestos Analytical Results

C-4016 Increment 3: Physical Sciences & Biology Buildings Demolition Project
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Sample Number	Material Description	Asbestos Content	Sample Location
BIO-A079	Orange Peel Wall Tile on Drywall	Not Analyzed (Prior Positive)	Room 12
BIO-A080	Joint Compound/Drywall with Orange Peel Wall Tile	Drywall: ND Joint Compound: 3% Chrysotile Asbestos Tape: ND Paint: ND	Room B8 Southeast Corner
BIO-A081	Joint Compound/Drywall with Orange Peel Wall Tile	Drywall: ND Joint Compound: 3% Chrysotile Asbestos Tape: ND Paint: ND	Room 6, South Wall East End
BIO-A082	Joint Compound/Drywall with Orange Peel Wall Tile	Drywall: ND Joint Compound: 3% Chrysotile Asbestos Tape: ND Paint: ND	Room 12
BIO-A083	Concrete	Concrete: ND Paint: ND	Room 3 Boiler Room, Upper West Side, on Equipment Pads
BIO-A084	Concrete	Concrete: ND Paint: ND	Room 3 Boiler Room, South Wall, on Equipment Pads
BIO-A085	Pipe Gaskets	ND	Room 3 Boiler Room, Southeast Corner
BIO-A086	Pipe Gaskets	ND	Room 3 Boiler Room, South Wall
BIO-A087	12"x12" Off-White Wall Tiles Over Brown Mastic	Tile: ND Coating (White): ND Mastic: ND	Room 1, North Wall
BIO-A088	12"x12" Off-White Wall Tiles Over Brown Mastic	Tile: ND Coating (White): ND Mastic: ND	Room 1, North Wall
BIO-A089	Tank Insulation	20% Amosite Asbestos 5% Chrysotile Asbestos	Room 3 Boiler Room
BIO-A090	Tank Insulation	Not Analyzed (Prior Positive)	Room 3 Boiler Room
BIO-A091	Tank Insulation	Not Analyzed (Prior Positive)	Room 3 Boiler Room
BIO-A092	White HVAC Vibration Dampeners	40% Chrysotile Asbestos	Room 26
BIO-A093	White HVAC Vibration Dampeners	Not Analyzed (Prior Positive)	Room 37
BIO-A094	Green HVAC Vibration Dampeners	ND	Room 26
BIO-A095	Green HVAC Vibration Dampeners	ND	Room 37

Table 3. Summary of Asbestos Analytical Results

C-4016 Increment 3: Physical Sciences & Biology Buildings Demolition Project
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Sample Number	Material Description	Asbestos Content	Sample Location
BIO-A096	Black Mastic on HVAC Coils Drip Pan	15% Chrysotile Asbestos	Room 26
BIO-A097	Black Mastic on HVAC Coils Drip Pan	Not Analyzed (Prior Positive)	Room 37
BIO-A098	White Cloth HVAC Gasket on HVAC	80% Chrysotile Asbestos	Room 13
BIO-A099	White Cloth HVAC Gasket on HVAC	Not Analyzed (Prior Positive)	Room 13
BIO-A100	Roof Curb Flashing	Tar with Gravel: ND Felt: ND Brown Fibrous Insulation: ND	Roof West Side North End
BIO-A101	Roof Curb Flashing	Tar with Gravel: ND Felt: ND Brown Fibrous Insulation: ND	Roof, West Side, North End
BIO-A102	Roof Exhaust Penetration Mastic	ND	Roof
BIO-A103	Roof Exhaust Penetration Mastic	ND	Roof
BIO-A104	Off-White Insulation on Pipe Bracket, Chilled Water Return Line	ND	Roof, Southwest Corner
BIO-A105	Off-White Insulation on Pipe Bracket	ND	Roof, West Side of HVAC Unit
BIO-A106	HVAC Seam Mastic	Mastic: ND Paint (Silver): 8% Chrysotile Asbestos Mesh: ND	Roof, Center, Old HVAC
BIO-A107	HVAC Seam Mastic	Not Analyzed (Prior Positive)	Roof, Southeast Corner, Old HVAC
BIO-A108	Gray Rolled Roof Patch	Shingle: ND Tar: ND Cellulose Felt: ND	Roof, Southeast Corner
BIO-A110	Gray Rolled Roof Patch	Shingle: ND Tar: ND Cellulose Felt: ND	Roof, North Side
BIO-A111	Gray Roof Mastic on Gray Rolled Roof Patches	ND	Roof, Southeast Corner
BIO-A112	Dark Gray Sealant on Generator Exhaust Duct Fan	2% Chrysotile Asbestos	Roof, Southeast Corner
BIO-A113	Dark Gray Sealant on Generator Exhaust Duct Fan	Not Analyzed (Prior Positive)	Roof, Southeast Corner
BIO-A114	Light Gray HVAC Seam Mastic	ND	Roof, Newer HVAC Unit Duct
BIO-A115	Light Gray HVAC Seam Mastic	ND	Roof, Newer HVAC Unit Duct

Table 3. Summary of Asbestos Analytical Results

C-4016 Increment 3: Physical Sciences & Biology Buildings Demolition Project
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Sample Number	Material Description	Asbestos Content	Sample Location
BIO-A116	Dark Gray HVAC Seam Mastic	ND	Roof, Southwest Corner of HVAC Unit
BIO-A117	Dark Gray HVAC Seam Mastic	ND	Roof, Northwest Corner of HVAC Unit
BIO-A118	Beige Sealant on Exhaust Fan Seam	ND	Roof, Northwest, Old HVAC Unit
BIO-A119	Beige Sealant on Exhaust Fan Seam	ND	Roof, Northwest, Old HVAC Unit
BIO-A120	Silver Aluminum with Black Adhesive Duct Lining	ND	Northwest from Old HVAC Vent
BIO-A121	Silver Aluminum with Black Adhesive Duct Lining	Aluminum: ND Adhesive: ND	Northwest from Old HVAC Vent
BIO-A124	Black Coating	ND	Room 3 Boiler Room, North East Corner, On Roof Access Ladder
BIO-A125	Black Coating	ND	Room 3 Boiler Room, North East Corner, On Roof Access Ladder
BIO-A126	Stucco	Stucco: ND Skim Coat: <1% Chrysotile	Exterior, North at Entry Soffit Ceiling
BIO-A127	Stucco	Stucco: ND Skim Coat: <1% Chrysotile	Exterior, South at Entry Soffit Ceiling
BIO-A128	Stucco	Stucco: ND Skim Coat: <1% Chrysotile	Exterior, South at Entry Soffit Ceiling
BIO-A129	Concrete	ND	Room 22
BIO-A130	Concrete	ND	Room 4 Boiler Room
BIO-A131	Concrete	2% Chrysotile Asbestos	Exterior, West Side South End
BIO-A131A	Concrete	ND	Exterior West Side, South End Approximately 1.5 Feet away from Sample A131 was Collected
BIO-A131B	Concrete	ND	Exterior East Side, North End
BIO-A132	White Caulk Putty	ND	Exterior, South Side at Entry, Between Brick and Metal Window Frame
BIO-A133	White Caulk Putty	ND	Exterior, South Side at Entry, Between Brick and Metal Window Frame
BIO-A134	Light Gray Caulk	2% Chrysotile Asbestos	Exterior, East Side South End, Between Glass and Window Frame
BIO-A135	Light Gray Caulk	2% Chrysotile Asbestos	Exterior, West Side North End, Between Glass and Window Frame

Table 3. Summary of Asbestos Analytical Results

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Sample Number	Material Description	Asbestos Content	Sample Location
BIO-A136	Duct Wrap	Insulation: ND Mesh: ND	Room 26, Over Fiberglass
BIO-A137	Duct Wrap	Insulation: ND Mesh: ND	Room 37, Over Fiberglass
BIO-A138	Duct Wrap	Insulation: ND Mesh: ND	Room 13, Over Fiberglass
BIO-A139	Tar and Gravel Roof Field	Tar/Gravel: ND Glossy Tar: ND	Roof, Southeast Corner
BIO-A140	Tar and Gravel Roof Field	Tar/Gravel: ND Glossy Tar: ND	Roof, Center
BIO-A141	Tar and Gravel Roof Field	Tar/Gravel: ND Glossy Tar: ND	Roof, North Side
BIO-A142	Pipe Jacket	Insulation: ND Mesh/Coating: ND	Room 41, Over Fiberglass on 4" Outside Diameter Pipe Run
BIO-A143	Pipe Jacket	Insulation: ND Mesh/Coating: ND	Room 17, Over Fiberglass on 4" Outside Diameter Pipe Run
BIO-A144	Pipe Jacket	Insulation: ND Mesh/Coating: ND	Room 43, Over Fiberglass on 4" Outside Diameter Pipe Run
BIO-A145	1"x1" Gray Ceramic Floor Tile with Gray Grout and Off- White Mortar	Ceramic Tile: ND Grout: ND Mortar: ND	Men's Restroom
BIO-A146	1"x1" Gray Ceramic Floor Tile with Gray Grout and Off- White Mortar	Ceramic Tile: ND Grout: ND Mortar: ND	Men's Restroom
BIO-A147	Off-White HVAC Seam Tape	Coating (White): ND Mesh: ND	Room 21
BIO-A148	Off-White HVAC Seam Tape	Coating (White): ND Mesh: ND	East Room 39
BIO-A149	Black Moisture Barrier	Cellulose/Tar: ND	Exterior, East Side South End, Behind Upper Wall Wood Panel
BIO-A150	Black Moisture Barrier	Cellulose/Tar: ND	Exterior, East Side South End, Behind Upper Wall Wood Panel
BIO-A151	Concrete	ND	Room 43
BIO-A152	Concrete Foundation Wall	ND	Exterior West Side, North End
BIO-A153	Concrete Foundation Wall	ND	Exterior South Side Foundation Wall Near Building Entry
Boiler Room Building			
BR-01-A	Mortar	ND	Exterior, Northwest Corner Wall
BR-02-A	Mortar	ND	Exterior, North Side Wall
BR-03-A	Concrete	Trace Chrysotile	West Entry Threshold, Pad
BR-04-A	Concrete	Sample Not Analyzed Due to Prior Positive	Northwest Quadrant, Pad

Table 3. Summary of Asbestos Analytical Results

C-4016 Increment 3: Physical Sciences & Biology Buildings Demolition Project
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Sample Number	Material Description	Asbestos Content	Sample Location
BR-05-A	Concrete	ND	West Entry, Wall Footer
BR-06-A	Concrete	ND	South Wall, Center, Wall Footer
BR-07-A	Sealant	ND	Exterior, South Wall, Penetration
BR-08-A	Sealant	ND	Exterior, South Wall, Penetration
BR-09-A	Sealant	Trace Chrysotile	Exterior, East Side, Louvre, South of Center
BR-10-A	Sealant	Sample Not Analyzed Due to Prior Positive	Exterior, East Side, Louvre, Center
BR-11-A	Glazing	ND	Exterior, East Side, South of Center
BR-12-A	Glazing	ND	Exterior, East Side, East Door
BR-13-A	Gasket	ND	Exterior, North Side, West of Center
BR-14-A	Gasket	ND	Exterior, North Side, West of Center
BR-15-A	TSI	3% Chrysotile 15% Amosite	North Side, West of Center, 10" Line Straight Run Pipe
BR-16-A	TSI	Sample Not Analyzed Due to Prior Positive	North Side, West of Center, 10" Line Straight Run Pipe
BR-17-A	TSI	Sample Not Analyzed Due to Prior Positive	South Side, West of Center, Elevated 10" Straight Run Pipe
BR-18-A	TSI	3% Chrysotile 10% Amosite	South Side, West of Center, Elevated 10" Elbow
BR-19-A	TSI	Sample Not Analyzed Due to Prior Positive	Northwest Quadrant, 10" Elbow
BR-20-A	Plaster Wall	ND	Boiler Room, West Wall
BR-21-A	Plaster Wall	ND	Boiler Room, Southeast Corner
BR-22-A	Plaster Wall	ND	Boiler Room, Northeast Corner
BR-23-A	Plaster Wall	ND	Boiler Room, Northwest Corner
BR-24-A	Plaster Wall	ND	Boiler Room, Southwest Corner
BR-25-A	TSI	ND	South Side, Near Center, Elevated 4" Straight Run
BR-26-A	TSI	ND	South Side, East of Center, Elevated 4" Straight Run
BR-27-A	TSI	ND	South Side, East of Center, Elevated 4" Straight Run
BR-28-A	TSI	3% Chrysotile 10% Amosite	South Side, Straight Run, 6" Vertical
BR-29-A	TSI	Sample Not Analyzed Due to Prior Positive	South Side, Straight Run, 6" Vertical

Table 3. Summary of Asbestos Analytical Results

C-4016 Increment 3: Physical Sciences & Biology Buildings Demolition Project
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Sample Number	Material Description	Asbestos Content	Sample Location
BR-30-A	TSI	Sample Not Analyzed Due to Prior Positive	South Side, Straight Run, 6" Vertical
BR-31-A	TSI	Sample Not Analyzed Due to Prior Positive	South Side, Elbow, 6"
BR-RF-A01	Black Penetration Roof Mastic	ND	Boiler Room Roof West Area
BR-RF-A02	Black Penetration Roof Mastic	ND	Boiler Room Roof East Area
BR-RF-A03	Roof Field	Stones: ND Black Tar: ND Black Felt: ND	Boiler Room Roof West Area
BR-RF-A04	Roof Field	Stones: ND Black Tar: ND Black Felt: ND	Boiler Room Roof Center Area
BR-RF-A05	Roof Field	Stones: ND Black Tar: ND Black Felt: ND	Boiler Room Roof East Area
Physical Sciences Building North			
PSBN-001	12"x12" Floor Tile White With Blue Specks over Brown Mastic and Green Mastic	ND	Physical Sciences Building North, Room PS-109, Southeast Area, Floor
PSBN-002	12"x12" Floor Tile White With Blue Specks over Brown Mastic and Green Mastic	ND	Physical Sciences Building North, Corridor 2, Northeast Area, Floor
PSBN-003	Gray Vinyl Sheet Flooring	ND	Physical Sciences Building North, Corridor 1 Stairs, Northwest Area, Floor
PSBN-004	Gray Vinyl Sheet Flooring	ND	Physical Sciences Building North, Corridor 1 Stairs, Southeast Area, Floor
PSBN-005	Blue Carpet Over Brown Mastic	ND	Physical Sciences Building North, Room PS-113, Northeast Area, Floor
PSBN-006	Blue Carpet Over Brown Mastic	ND	Physical Sciences Building North, Room PS-106, Southwest Area, Floor
PSBN-007	Red Carpet Over Brown Mastic	ND	Physical Sciences Building North, Room PS-123, Northwest Area, Floor
PSBN-008	Red Carpet Over Brown Mastic	ND	Physical Sciences Building North, Room PS-131, West Center Area, Floor
PSBN-009	Brown Carpet Over Tan Mastic	ND	Physical Sciences Building North, PS Room 117, East Corner, Floor

Table 3. Summary of Asbestos Analytical Results

C-4016 Increment 3: Physical Sciences & Biology Buildings Demolition Project
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Sample Number	Material Description	Asbestos Content	Sample Location
PSBN-010	Brown Carpet Over Tan Mastic	ND	Physical Sciences Building North, PS Room 118, Northeast Corner, Floor
PSBN-011	12"x12" Brown with White Specks Floor Tile Over Black Mastic	Tile: ND Mastic: 5% Chrysotile Asbestos	Physical Sciences Building North, PS Room 101, Southeast Corner, Floor
PSBN-012	12"x12" Brown with White Specks Floor Tile Over Black Mastic	Sample Not Analyzed Due to Prior Positive	Physical Sciences Building North, PS Room 102, Northwest Corner, Floor
PSBN-013	12"x12" Blue with White Streaks Floor Tile Over Black Mastic	Tile: ND Mastic: 5% Chrysotile Asbestos	Physical Sciences Building North, PS Room 101, East Area, Floor
PSBN-014	12"x12" Blue with White Streaks Floor Tile Over Black Mastic	Sample Not Analyzed Due to Prior Positive	Physical Sciences Building North, PS Room 101, West Area, Floor
PSBN-015	12"x12" Beige with Gray Streaks Floor Tile Over Black Mastic Over Brown Mastic	Tile: ND Mastic: 5% Chrysotile Asbestos	Physical Sciences Building North, PS Room 102, Southwest Area, Floor
PSBN-016	12"x12" Beige with Gray Streaks Floor Tile Over Black Mastic Over Brown Mastic	Sample Not Analyzed Due to Prior Positive	Physical Sciences Building North, PS Room 101, East Area, Floor
PSBN-017	12"x12" Red Floor Tile Over Black Mastic	Tile: ND Black Mastic: 5% Chrysotile Asbestos	Physical Sciences Building North, PS Room 102, West Area, Floor
PSBN-018	12"x12" Red Floor Tile Over Black Mastic	Sample Not Analyzed Due to Prior Positive	Physical Sciences Building North, PS Room 102, East Area, Floor
PSBN-019	12"x12" Gray with Black Dots Floor Tile Over Black Mastic	Tile: ND Mastic: 5% Chrysotile Asbestos	Physical Sciences Building North, PS Room 102, South Area, Floor
PSBN-020	12"x12" Gray with Black Dots Floor Tile Over Black Mastic	Sample Not Analyzed Due to Prior Positive	Physical Sciences Building North, PS Room 102, North Area, Floor
PSBN-021	2"x2" Gray Ceramic Floor Tile and Grout	Tile: ND Grout: ND	Physical Sciences Building North, Men's Bathroom, South Area, Floor
PSBN-022	2"x2" Gray Ceramic Floor Tile and Grout	Tile: ND Grout: ND	Physical Sciences Building North, Women's Bathroom, North Area, Floor
PSBN-023	Beige Baseboard Mastic	ND	Physical Sciences Building North, Corridor, Adjacent to Entry I-031
PSBN-024	Beige Baseboard Mastic	ND	Physical Sciences Building North, Corridor, Adjacent to Entry I-031

Table 3. Summary of Asbestos Analytical Results

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Sample Number	Material Description	Asbestos Content	Sample Location
PSBN-025	White Wallpaper with Adhesive	ND	Physical Sciences Building North, Room PS-107, Northeast Area, East Wall
PSBN-026	White Wallpaper with Adhesive	ND	Physical Sciences Building North, Corridor 2, Northwest Area, Wall
PSBN-027	Wallboard and Joint Compound	Wallboard: ND Joint Compound: 2% Chrysotile Asbestos Tape: ND Paint: ND	Physical Sciences Building North, Room PS-110, Northwest Corner, Wall
PSBN-028	Wallboard and Joint Compound	Sample Not Analyzed Due to Prior Positive	Physical Sciences Building North, Room PS-107, Southeast Corner, Wall
PSBN-029	Wallboard and Joint Compound	Sample Not Analyzed Due to Prior Positive	Physical Sciences Building North, Room PS-106, Northwest Corner, Wall
PSBN-030	Wallboard and Joint Compound	Sample Not Analyzed Due to Prior Positive	Physical Sciences Building North, Room PS-132, North Corner, Wall
PSBN-031	Wallboard and Joint Compound	Sample Not Analyzed Due to Prior Positive	Physical Sciences Building North, Corridor 3, Northeast Corner, Wall
PSBN-032	Wall Texture Large Splotch	Texture: ND Paint: ND	Physical Sciences Building North, Room PS-101, East Center Area, Wall
PSBN-033	Wall Texture Large Splotch	Texture: 2% Chrysotile Asbestos Paint: ND	Physical Sciences Building North, Corridor, Adjacent to Room 106, West Wall
PSBN-034	Wall Texture Large Splotch	Sample Not Analyzed Due to Prior Positive	Physical Sciences Building North, Corridor, Adjacent to Room 102, North Wall
PSBN-035	Wall Texture Large Splotch	Sample Not Analyzed Due to Prior Positive	Physical Sciences Building North, Corridor, Adjacent to Room 116, South Wall
PSBN-036	Wall Texture Large Splotch	Sample Not Analyzed Due to Prior Positive	Physical Sciences Building North, Corridor, Adjacent to Room 101, South Wall
PSBN-037	Wall Texture Orange Peel Splotch	Texture: 2% Chrysotile Asbestos Paint: ND	Physical Sciences Building North, Corridor, Adjacent to Room 116, North Wall
PSBN-038	Wall Texture Orange Peel Splotch	Sample Not Analyzed Due to Prior Positive	Physical Sciences Building North, Corridor, Adjacent to Men's Restroom, South Wall
PSBN-039	Wall Texture Orange Peel Splotch	Sample Not Analyzed Due to Prior Positive	Physical Sciences Building North, Corridor, Adjacent to

Table 3. Summary of Asbestos Analytical Results

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Sample Number	Material Description	Asbestos Content	Sample Location
			Women's Restroom, North Wall
PSBN-040	Wall Texture Orange Peel Splotch	Sample Not Analyzed Due to Prior Positive	Physical Sciences Building North, Corridor, Adjacent to Room 132, Northwest Corner, Wall
PSBN-041	Wall Texture Orange Peel Splotch	Sample Not Analyzed Due to Prior Positive	Physical Sciences Building North, Room PS-130, Northeast Area, Wall
PSBN-042	Brick and Mortar	Cementitious Material: ND Mortar: ND	Physical Sciences Building North, Corridor 2, Southwest Area, Wall
PSBN-043	Brick and Mortar	Cementitious Material: ND Mortar: ND	Physical Sciences Building North, Corridor 1, Southeast Area, Wall
PSBN-044	2'x4' White Ceiling Tile with Pinholes	ND	Physical Sciences Building North, Central Corridor, Northeast Area, Ceiling
PSBN-045	2'x4' White Ceiling Tile with Pinholes	ND	Physical Sciences Building North, Room PS-101, Northwest Area, Ceiling
PSBN-046	12"x12" White Ceiling Tile with Fissures over Hockey Puck Mastic	ND	Physical Sciences Building North, Room PS-131, Central Area, Ceiling
PSBN-047	12"x12" White Ceiling Tile with Fissures over Hockey Puck Mastic	ND	Physical Sciences Building North, Corridor 1, Southwest Area, Ceiling
PSBN-048	Gray Window Caulking	ND	Physical Sciences Building North, Room PS-107, Southwest Area, Window
PSBN-049	Gray Window Caulking	ND	Physical Sciences Building North, Room PS-107, Northwest Area, Window
PSBN-050	White Sink Undercoat	Coating: 2% Chrysotile Asbestos	Physical Sciences Building North, Room PS-130, Under Sink
PSBN-051	White Sink Undercoat	Sample Not Analyzed Due to Prior Positive	Physical Sciences Building North, Room PS-130, Under Sink
PSBN-052	Black Sink Undercoat	ND	Physical Sciences Building North, Room PS-110, Under Sink
PSBN-053	Black Sink Undercoat	ND	Physical Sciences Building North, Room PS-110, Under Sink

Table 3. Summary of Asbestos Analytical Results

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Sample Number	Material Description	Asbestos Content	Sample Location
PSBN-054	3"x6" Red Ceramic Wall Tile with Grout	ND	Physical Sciences Building North, Men's Restroom, Southeast Area, South Wall
PSBN-055	3"x6" Red Ceramic Wall Tile with Grout	ND	Physical Sciences Building North, Women's Restroom, Northeast Area, North Wall
PSBN-056	Black Lab Table	10% Chrysotile Asbestos	Physical Sciences Building North, Room PS-113, Lab Table
PSBN-057	Black Lab Table	Sample Not Analyzed Due to Prior Positive	Physical Sciences Building North, Room PS-106, Lab Table
PSBN-058	Black Window Caulking	2% Chrysotile	Physical Sciences Building North, Room PS-109, Southwest Area, Window
PSBN-059	Black Window Caulking	Sample Not Analyzed Due to Prior Positive	Physical Sciences Building North, Room PS-109, Northeast Area, Window
PSBN-060	Red Firestop	ND	Physical Sciences Building North, Room PS-132, Attic, South Area, Wall
PSBN-061	Red Firestop	ND	Physical Sciences Building North, Room PS-110B, Attic, East Center Area, Wall
PSBN-062	Black Duct Tape	ND	Physical Sciences Building North, Room PS-132, South Area, on Duct
PSBN-063	Black Duct Tape	ND	Physical Sciences Building North, Room PS-132, Southwest Area, on Duct
PSBN-064	Off-White Duct Vibration Cloth	ND	Physical Sciences Building North, Room PS-130, West Area, on Duct
PSBN-065	Off-White Duct Vibration Cloth	ND	Physical Sciences Building North, Room PS-130, Attic, West Area, on Duct
PSBN-066	Off-White Insulation Wrap	ND	Physical Sciences Building North, Room PS-130, Attic, East Area, on Pipe
PSBN-067	Off-White Insulation Wrap	ND	Physical Sciences Building North, Corridor 3, Center Area, on Pipe
PSBN-068	Off-White Insulation Wrap	ND	Physical Sciences Building North, Room PS-110B, Attic, Southeast Area, on Pipe

Table 3. Summary of Asbestos Analytical Results

C-4016 Increment 3: Physical Sciences & Biology Buildings Demolition Project
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Sample Number	Material Description	Asbestos Content	Sample Location
PSBN-069	Black Fiberglass Panel Cloth	ND	Physical Sciences Building North, Room PS-132, Attic, Northwest Area, on Ceiling
PSBN-070	Black Fiberglass Panel Cloth	ND	Physical Sciences Building North, Room PS-132, Attic, Northwest Area, on Ceiling
PSBN-071	Yellow Insulation Mastic	ND	Physical Sciences Building North, Room PS-110B, Attic, Southeast Area, on Tank
PSBN-072	Yellow Insulation Mastic	ND	Physical Sciences Building North, Room PS-110B, Attic, Southeast Area, on Tank
PSBN-073	Yellow Insulation Mastic	ND	Physical Sciences Building North, Room PS-110B, Attic, Southeast Area, on Tank
PSBN-074	Silver Duct Tape	ND	Physical Sciences Building North, Room PS-110B, Attic, Northeast Area, on Duct
PSBN-075	Silver Duct Tape	ND	Physical Sciences Building North, Room PS-110B, Attic, Northeast Area, on Duct
PSBN-076	Roof Field	ND	Physical Sciences Building North, Roof I, North Center Area, Floor
PSBN-077	Roof Field	ND	Physical Sciences Building North, Roof I, Central Area, Floor
PSBN-078	Middle Roof Field	ND	Physical Sciences Building North, Roof B, Central Area, Floor
PSBN-079	Middle Roof Field	ND	Physical Sciences Building North, Roof J, Southwest Area, Floor
PSBN-080	Middle Roof Field	ND	Physical Sciences Building North, Roof F, Central Area, Floor
PSBN-082	Roof Field	ND	Physical Sciences Building North, Roof H, Central Area, Floor
PSBN-083	Upper Roof Field	ND	Physical Sciences Building North, Roof G, South Area, Floor
PSBN-084	Upper Roof Field	ND	Physical Sciences Building North, Roof G, North Area, Floor
PSBN-085	Vent Penetration Mastic	ND	Physical Sciences Building North, Roof F, East Center Area, Vent

Table 3. Summary of Asbestos Analytical Results

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Sample Number	Material Description	Asbestos Content	Sample Location
PSBN-086	Vent Penetration Mastic	ND	Physical Sciences Building North, Roof I, West Center Area, Vent
PSBN-087	Vent Penetration Mastic	ND	Physical Sciences Building North, Roof D, East Center Area, Vent
PSBN-088	Pipe Penetration Mastic	ND	Physical Sciences Building North, Roof I, Northeast Area, Pipe
PSBN-089	Pipe Penetration Mastic	ND	Physical Sciences Building North, Roof F, Southeast Area, Pipe
PSBN-090	Pipe Penetration Mastic	ND	Physical Sciences Building North, Roof B, East Center Area, Pipe
PSBN-091	Gray Mastic	ND	Physical Sciences Building North, Roof B, Adjacent to Electrical Unit, Floor
PSBN-092	Gray Mastic	ND	Physical Sciences Building North, Roof B, Adjacent to Electrical Unit, Floor
PSBN-093	White Roof Caulking	ND	Physical Sciences Building North, Roof J, West Wall
PSBN-094	White Roof Caulking	ND	Physical Sciences Building North, Roof F, South Wall
PSBN-095	Black Roof Caulking	ND	Physical Sciences Building North, Roof J, Southeast Area, Gutter
PSBN-096	Black Roof Caulking	ND	Physical Sciences Building North, Roof D, Northeast Area, Gutter
PSBN-097	Roof Flashing	ND	Physical Sciences Building North, Roof H, Northwest Area, South Wall
PSBN-098	Roof Flashing	ND	Physical Sciences Building North, Roof I, Northeast Area, North Wall
PSBN-099	Roof Flashing	ND	Physical Sciences Building North, Roof E, Northeast Area, North Wall
PSBN-100	Concrete Steps	ND	Exterior, Physical Sciences Building North, Lower Stairwell
PSBN-101	Concrete Steps	ND	Exterior, Physical Sciences Building North, Upper Stairwell
PSBN-102	White Window Caulking	ND	Exterior, Physical Sciences Building North, Northwest Area, North Wall

Table 3. Summary of Asbestos Analytical Results

C-4016 Increment 3: Physical Sciences & Biology Buildings Demolition Project
2600 Mission Bell Drive
San Pablo, California 94806

Sample Number	Material Description	Asbestos Content	Sample Location
PSBN-103	White Window Caulking	ND	Exterior, Physical Sciences Building North, West Center Area, West Wall
PSBN-104	Stucco Wall	ND	Exterior, Physical Sciences Building North, Northwest Area, Stairwell Wall
PSBN-105	Stucco Wall	ND	Exterior, Physical Sciences Building North, North Area, North Wall
PSBN-106	Stucco Wall	ND	Exterior, Physical Sciences Building North, West Center Area, West Wall
PSBN-107	Stucco Wall	ND	Exterior, Physical Sciences Building North, West Center Area, West Wall
PSBN-108	Stucco Wall	ND	Exterior, Physical Sciences Building North, West Area Wall
PSBN-109	Brick and Mortar	ND	Exterior, Physical Sciences Building North, Northwest Area, Stairwell Wall
PSBN-110	Brick and Mortar	ND	Exterior, Physical Sciences Building North, Southwest Area, South Wall
PSBN-111	Concrete Floor	ND	Exterior, Physical Sciences Building North, Northwest Area, Adjacent to Entry, Floor
PSBN-112	Concrete Floor	ND	Exterior, Physical Sciences Building North, Southwest Area, Floor
PSBN-113	Concrete Footing	ND	Exterior, Physical Sciences Building North, North Area, Lower Wall
PSBN-114	Concrete Footing	ND	Exterior, Physical Sciences Building North, Southwest Area, West Wall
Physical Sciences Building South			
PSBS-001	12"x12" Gray with Green Floor Tiles Over Tan Mastic	ND	Physical Sciences Building South, Corridor, Southwest Area, Floor
PSBS-002	12"x12" Gray with Green Floor Tiles Over Tan Mastic	ND	Physical Sciences Building South, Corridor, Northeast Area, Floor
PSBS-003	9"x9 Tan with Brown Streaks Floor Tile Over Black Mastic	Tile: 5% Chrysotile Mastic: 5% Chrysotile	Physical Sciences Building South, Room PS-1, Southeast Area, Floor

Table 3. Summary of Asbestos Analytical Results

C-4016 Increment 3: Physical Sciences & Biology Buildings Demolition Project
2600 Mission Bell Drive
San Pablo, California 94806

Sample Number	Material Description	Asbestos Content	Sample Location
PSBS-004	9"x9 Tan with Brown Streaks Floor Tile Over Black Mastic	Sample Not Analyzed Due to Prior Positive Result	Physical Sciences Building South, Room PS-1, Northwest Area, Floor
PSBS-005	12"x12" Beige with Dark Gray and White Floor Tiles over Black Mastic	Tile: ND Mastic: 5% Chrysotile	Physical Sciences Building South, Room PS-1, Central Area, Floor
PSBS-006	12"x12" Beige with Dark Gray and White Floor Tiles over Black Mastic	Sample Not Analyzed Due to Prior Positive Result	Physical Sciences Building South, Room PS-1, Northeast Area, Floor
PSBS-007	12"x12" Dark gray with White Streaks Floor Tiles over Black Mastic	Tile: 3% Chrysotile Mastic: 5% Chrysotile	Physical Sciences Building South, Room PS-5, Northeast Area, Floor
PSBS-008	12"x12" Dark gray with White Streaks Floor Tiles over Black Mastic	Sample Not Analyzed Due to Prior Positive Result	Physical Sciences Building South, Room 108, Southwest Area, Floor
PSBS-009	12"x12" Red with Black Streaks Floor Tile over Black and Yellow Mastic	Tile: ND Mastic: 5% Chrysotile	Physical Sciences Building South, Room PS-5, Southeast Area, Floor
PSBS-010	12"x12" Red with Black Streaks Floor Tile over Black and Yellow Mastic	Sample Not Analyzed Due to Prior Positive Result	Physical Sciences Building South, Room PS-5, Southeast Area, Floor
PSBS-011	12"x12" Light Brown with White Streaks Floor Tile over Yellow Mastic	Tile: 2% Chrysotile Mastic: ND	Physical Sciences Building South, Room PS-5, Southwest Area, Floor
PSBS-012	12"x12" Light Brown with White Streaks Floor Tile over Yellow Mastic	Sample Not Analyzed Due to Prior Positive Result	Physical Sciences Building South, Room PS-5, Southwest Area, Floor
PSBS-013	Concrete Floor	ND	Physical Sciences Building South, Room PS-6, Southeast Area, Floor
PSBS-014	Concrete Floor	ND	Physical Sciences Building South, Room PS-19, Northeast Area, Floor
PSBS-015	Tan Baseboard Mastic	ND	Physical Sciences Building South, Corridor, Southwest Area, Wall Adjacent to PS-6
PSBS-016	Tan Baseboard Mastic	ND	Physical Sciences Building South, Corridor, Northeast Area, Wall Adjacent to PS-19
PSBS-017	Black Baseboard Mastic	ND	Physical Sciences Building South, Room PS-6, Central Area
PSBS-018	Black Baseboard Mastic	ND	Physical Sciences Building South, Room PS-14, Central Area
PSBS-019	Plaster Wall	ND	Physical Sciences Building South, Room PS-2, Northeast Area, Wall

Table 3. Summary of Asbestos Analytical Results

C-4016 Increment 3: Physical Sciences & Biology Buildings Demolition Project
 2600 Mission Bell Drive
 San Pablo, California 94806

Sample Number	Material Description	Asbestos Content	Sample Location
PSBS-020	Plaster Wall	ND	Physical Sciences Building South, Corridor, Central Area, South Wall
PSBS-021	Plaster Wall	ND	Physical Sciences Building South, Room PS-14, East Wall, Center Area
PSBS-022	Wall Texture	ND	Physical Sciences Building South, Corridor, Southwest Area, West Wall
PSBS-023	Wall Texture	ND	Physical Sciences Building South, Room PS-10, East Wall, Central Area
PSBS-024	Wall Texture	ND	Physical Sciences Building South, Corridor, Northeast Area, North Wall
PSBS-025	2'x4' White Ceiling Tile with Pinholes	ND	Physical Sciences Building South, Corridor, Southwest Area, Ceiling
PSBS-026	2'x4' White Ceiling Tile with Pinholes	ND	Physical Sciences Building South, Corridor, Northeast Area, Ceiling
PSBS-027	12"x12" White Ceiling Tile with Hockey Puck Mastic	ND	Physical Sciences Building South, Corridor, Southwest Area, Ceiling
PSBS-028	12"x12" White Ceiling Tile with Hockey Puck Mastic	ND	Physical Sciences Building South, Room PS-5, Central Area, Ceiling
PSBS-029	Yellow Pipe Insulation Wrap	ND	Physical Sciences Building South, Corridor, West Area
PSBS-030	Yellow Pipe Insulation Wrap	ND	Physical Sciences Building South, Corridor, West Area
PSBS-031	Off-White Pipe Insulation Wrap	ND	Physical Sciences Building South, Corridor, West Area
PSBS-032	Off-White Pipe Insulation Wrap	ND	Physical Sciences Building South, Room PS-2, Central Area
PSBS-033	Off-White Pipe Insulation Wrap	ND	Physical Sciences Building South, Room PS-2, South Area
PSBS-034	Off-White Pipe Insulation Wrap	ND	Physical Sciences Building South, Room PS-12, Southeast Area
PSBS-035	Off-White Duct Insulation Wrap	ND	Physical Sciences Building South, Room PS-2, Central Area
PSBS-036	Off-White Duct Insulation Wrap	ND	Physical Sciences Building South, Room PS-12, East Central Area

Table 3. Summary of Asbestos Analytical Results

C-4016 Increment 3: Physical Sciences & Biology Buildings Demolition Project
2600 Mission Bell Drive
San Pablo, California 94806

Sample Number	Material Description	Asbestos Content	Sample Location
PSBS-037	Off-White Duct Insulation Wrap	ND	Physical Sciences Building South, Room PS-12, East Central Area
PSBS-038	Brick and Mortar	ND	Physical Sciences Building South, Corridor, Northwest Area, North Wall
PSBS-039	Brick and Mortar	ND	Physical Sciences Building South, Room PS-1, Southeast Area, East Wall
PSBS-040	Black Lab Table	ND	Physical Sciences Building South, Room PS-5, Central Area, Lab Table
PSBS-041	Black Lab Table	ND	Physical Sciences Building South, Room PS-6, Northeast Area, Lab Table
PSBS-042	Black Exhaust System Table Top	10% Chrysotile Asbestos	Physical Sciences Building South, Room PS-6, West Central Area
PSBS-043	Black Exhaust System Table Top	Sample Not Analyzed Due to Prior Positive Result	Physical Sciences Building South, Room PS-14, East Central Area
PSBS-044	Gray Exhaust System Panel	10% Chrysotile Asbestos	Physical Sciences Building South, Room PS-5, Southwest Area
PSBS-045	Gray Exhaust System Panel	Sample Not Analyzed Due to Prior Positive Result	Physical Sciences Building South, Room PS-5, Southwest Area
PSBS-046	Exhaust System Vibration Cloth	ND	Physical Sciences Building South, Room PS-5, Southwest Area
PSBS-047	Exhaust System Vibration Cloth	ND	Physical Sciences Building South, Room PS-5, Southwest Area
PSBS-048	Red Duct Tape	ND	Physical Sciences Building South, Room PS-5, Southwest Area
PSBS-049	Red Duct Tape	ND	Physical Sciences Building South, Room PS-5, Southwest Area
PSBS-050	Black Exhaust System Panel	10% Chrysotile Asbestos	Physical Sciences Building South, Room PS-6, West Center Area
PSBS-051	Black Exhaust System Panel	Sample Not Analyzed Due to Prior Positive Result	Physical Sciences Building South, Room PS-14, East Center Area
PSBS-052	Black Sink Undercoat	ND	Physical Sciences Building South, Room PS-12, Under Sink

Table 3. Summary of Asbestos Analytical Results

C-4016 Increment 3: Physical Sciences & Biology Buildings Demolition Project
2600 Mission Bell Drive
San Pablo, California 94806

Sample Number	Material Description	Asbestos Content	Sample Location
PSBS-053	Black Sink Undercoat	ND	Physical Sciences Building South, Room PS-19, Under Sink
PSBS-054	Red Firestop	ND	Physical Sciences Building South, Room 108, South Center Area, Wall
PSBS-055	Red Firestop	ND	Physical Sciences Building South, Room 108, North Center Area, Wall
PSBS-056	White Insulation Packing	10% Amosite Asbestos 5% Chrysotile Asbestos	Physical Sciences Building South, Room PS-12, Southeast Area
PSBS-057	White Insulation Packing	Sample Not Analyzed Due to Prior Positive Result	Physical Sciences Building South, Room PS-2, South Center Area
PSBS-058	White Insulation Packing	Sample Not Analyzed Due to Prior Positive Result	Physical Sciences Building South, Room PS-12, Southwest Area
PSBS-059	Duct Joint Cloth	ND	Physical Sciences Building South, Room PS-12, East Central Area
PSBS-060	Duct Joint Cloth	ND	Physical Sciences Building South, Room PS
PSBS-061	Plaster Wall	ND	Physical Sciences Building South, Room PS-11, East Wall, Center Area
PSBS-062	Plaster Wall	ND	Physical Sciences Building South, Room PS-15, Northeast Area, East Wall
PSBS-063	Wall Texture	ND	Physical Sciences Building South, Room PS-10, South Wall, Center Area
PSBS-064	Wall Texture	ND	Physical Sciences Building South, Corridor, North Wall, Center Area
PSBS-065	Wallboard and Joint Compound	Drywall: ND Joint Compound: 2% Chrysotile	Physical Sciences Building South, Room PS-19, Northeast Area, at Wall and Ceiling
PSBS-066	Wallboard and Joint Compound	Sample Not Analyzed Due to Prior Positive Result	Physical Sciences Building South, Room 108, Southwest Corner, Wall
PSBS-067	Wallboard and Joint Compound	Sample Not Analyzed Due to Prior Positive Result	Physical Sciences Building South, Room PS-1, Southeast Area, Wall
PSBS-068	Off White Pipe Fitting	10% Chrysotile Asbestos 5% Crocidolite	Physical Sciences Building South, Room PS-2, Water Heater Closet, Pipe

Table 3. Summary of Asbestos Analytical Results

C-4016 Increment 3: Physical Sciences & Biology Buildings Demolition Project
2600 Mission Bell Drive
San Pablo, California 94806

Sample Number	Material Description	Asbestos Content	Sample Location
PSBS-069	Off White Pipe Fitting	Sample Not Analyzed Due to Prior Positive Result	Physical Sciences Building South, Room PS-2, Water Heater Closet, Pipe
PSBS-070	Pipe Penetration Tape and Insulation	10% Amosite 2% Chrysotile	Physical Sciences Building South, Room PS-2, Water Heater Closet, Pipe Penetration
PSBS-071	Pipe Penetration Tape and Insulation	Sample Not Analyzed Due to Prior Positive Result	Physical Sciences Building South, Room PS-2, Water Heater Closet, Pipe Penetration
PSBS-072	Exhaust Hood	10% Chrysotile	Physical Sciences Building South, Room PS-6, East Center Area
PSBS-073	Exhaust Hood	Sample Not Analyzed Due to Prior Positive Result	Physical Sciences Building South, Room PS-14, West Center Area
PSBS-074	Black Lab Floor Mat	ND	Physical Sciences Building South, Room PS-12, Southwest Area, Floor
PSBS-075	Black Lab Floor Mat	ND	Physical Sciences Building South, Room PS-12, Southwest Area, Floor
PSBS-076	Silver Duct Tape	ND	Physical Sciences Building South, Room PS-12, Central Area, on Duct
PSBS-077	Silver Duct Tape	ND	Physical Sciences Building South, Room PS-12, Central Area, on Duct
PSBS-078	White Pipe	10% Chrysotile 2% Crocidolite	Physical Sciences Building South, Room PS-2, Water Heater Closet, Pipe
PSBS-079	White Pipe	Sample Not Analyzed Due to Prior Positive Result	Physical Sciences Building South, Room PS-2, Water Heater Closet, Pipe
PSBS-080	Pipe Penetration Tape and Insulation	10% Amosite 2% Chrysotile	Physical Sciences Building South, Room PS-2, Water Heater Closet, Pipe
PSBS-081	Concrete Slab	ND	Exterior, Physical Sciences Building South, Southwest Area, South Wall
PSBS-082	Concrete Slab	ND	Exterior, Physical Sciences Building South, South Center Area, South Wall
PSBS-083	White Window Caulking	Trace Chrysotile	Exterior, Physical Sciences Building South, North Center Area, Window

Table 3. Summary of Asbestos Analytical Results

C-4016 Increment 3: Physical Sciences & Biology Buildings Demolition Project
 2600 Mission Bell Drive
 San Pablo, California 94806

Sample Number	Material Description	Asbestos Content	Sample Location
PSBS-084	White Window Caulking	Sample Not Analyzed Due to Prior Positive Result	Exterior, Physical Sciences Building South, Northwest Area, Window
PSBS-085	Brick and Mortar	ND	Exterior, Physical Sciences Building South, Northwest Area, North Wall
PSBS-086	Brick and Mortar	ND	Exterior, Physical Sciences Building South, Southeast Area, East Wall
PSBS-087	Off-White Expansion Joint	5% Chrysotile	Exterior, Physical Sciences Building South, Southwest Corner, Wall
PSBS-088	Off-White Expansion Joint	Sample Not Analyzed Due to Prior Positive Result	Exterior, Physical Sciences Building South, Southwest Corner, Wall
PSBS-089	White Sealant	ND	Exterior, Physical Sciences Building South, Southeast Area, South Wall
PSBS-090	White Sealant	ND	Exterior, Physical Sciences Building South, Southeast Area, South Wall
PSBS-091	Black Caulking	5% Chrysotile	Exterior, Physical Sciences Building South, South Area, South Wall
PSBS-092	Black Caulking	Sample Not Analyzed Due to Prior Positive Result	Exterior, Physical Sciences Building South, South Center Area, South Wall
PSBS-093	Concrete Wall	ND	Exterior, Physical Sciences Building South, South Center Area, South Wall
PSBS-094	Concrete Wall	ND	Exterior, Physical Sciences Building South, Southeast Area, East Wall
PSBS-095	Stucco Siding	ND	Exterior, Physical Sciences Building South, Southeast Area, South Wall
PSBS-096	Stucco Siding	ND	Exterior, Physical Sciences Building South, Southeast Area, South Wall
PSBS-097	Stucco Siding	ND	Exterior, Physical Sciences Building South, Southeast Area, South Wall
PSBS-098	Upper Roof Field	ND	Exterior, Physical Sciences Building South, Southeast Area, Floor

Table 3. Summary of Asbestos Analytical Results

C-4016 Increment 3: Physical Sciences & Biology Buildings Demolition Project
2600 Mission Bell Drive
San Pablo, California 94806

Sample Number	Material Description	Asbestos Content	Sample Location
PSBS-099	Upper Roof Field	ND	Exterior, Physical Sciences Building South, Northwest Area, Floor
PSBS-100	Roof Flashing	ND	Exterior, Physical Sciences Building South, East Area, Flashing
PSBS-101	Roof Flashing	40% Chrysotile Asbestos	Exterior, Physical Sciences Building South, West Area, Flashing
PSBS-102	Lower Roof Field	ND	Physical Sciences Building South, Southwest Area, Floor
PSBS-103	Lower Roof Field	ND	Physical Sciences Building South, Northeast Area, Floor
PSBS-104	Gray Sealant	10% Chrysotile	Physical Sciences Building South, Northwest Area, Skylight
PSBS-105	Gray Sealant	Sample Not Analyzed Due to Prior Positive Result	Physical Sciences Building South, Southeast Area, Skylight
PSBS-106	Black Pipe Penetration Mastic	ND	Physical Sciences Building South, North Center Area, Pipe
PSBS-107	Black Pipe Penetration Mastic	ND	Physical Sciences Building South, South Center Area, Pipe
PSBS-108	Gray Vibration Cloth	ND	Physical Sciences Building South, Southeast Area, Duct
PSBS-109	Gray Vibration Cloth	ND	Physical Sciences Building South, Northwest Area, Duct
PSBS-110	Gray Duct Mastic	ND	Physical Sciences Building South, Roof, Southeast Area, Duct
PSBS-111	Gray Duct Mastic	ND	Physical Sciences Building South, Roof, Northwest Area, Duct

Analytical Method: Polarized Light Microscopy (PLM), EPA/600/R-93/116
ND = No Asbestos Detected

Table 4. Summary of Lead Analytical Results

C-4016 Increment 3: Physical Sciences & Biology Buildings Demolition Project
2600 Mission Bell Drive
San Pablo, California 94806

Sample Number	Material Description	Lead Content (wt. %/mg/kg or ppm)	Sample Location
Biological Science Building			
BIO-PB001	Orange Paint on Gypsum Wallboard	0.33%	Room 18, Southeast Corner Wall
BIO-PB002	1"x1" Ceramic Tile Gray with Black Specks	<7.7 ppm	Room 24, Southwest Corner from Countertop
BIO-PB003	Beige Paint on Gypsum Wallboard	0.14%	Room 26, Southeast Counter
BIO-PB004	4"x4" Off-White Ceramic Tile	210 ppm	Room 43, Wall
BIO-PB005	Off-White Paint on Gypsum Wallboard	<0.0078%	Room 12, Southeast Wall
BIO-PB006	Off-White Paint on Plaster	0.38%	Room 43, Northeast Corner Wall
BIO-PB007	Black Paint on Metal Beam	0.75%	Room 33, Center I-Beam
BIO-PB008	White Paint on Wood Trim	0.035%	Room 37, Corridor Door
BIO-PB009	Light Blue Paint on Gypsum Wallboard	<0.0081%	Corridor, South End, West Wall
BIO-PB010	Blue Paint on Wood	0.037%	Corridor, South End, Door 7
BIO-PB011	Off-White Paint on Wood	0.21%	Room 1, Southwest Adjacent Room to Electrical Beam
BIO-PB012	Beige Paint on Metal	0.016%	Room 1, Southeast Wall
BIO-PB013	Blue Paint on Metal	<0.0081	Room 3 Boiler Room, North Side Generator
BIO-PB014	Yellow Paint on Metal Support Post	0.037%	Room 3 Boiler Room
BIO-PB015	Red Paint on Metal Pipe Valve	0.022%	Room 3 Boiler Room, South Side
BIO-PB016	Gray Paint on Concrete	<0.0081%	Room 3 Boiler Room, Floor
BIO-PB017	Blue Paint on Wood	<0.0081%	Room 3 Boiler Room, South Wall Panel
BIO-PB018	1"x1" Gray Ceramic Tile	<8.9 ppm	Men's Restroom, Floor
BIO-PB019	Gray Paint on Metal	180,000 ppm	Roof Exhaust Flue
BIO-PB020	White Paint on Stucco	0.0073%	Exterior, South Side Soffit
BIO-PB021	Red Paint on Metal Duct	<0.0079%	Exterior, Southwest Corner, Duct Chase

BIO-PB022	White Paint on Metal Shade	0.023%	Exterior, West Side, Shade Lower
BIO-PB023	Beige Paint on Metal Trim	2.9%	Exterior, West Side Wall, Lower Header Trim
BIO-PB024	Brown Paint on Metal	0.063%	Exterior, Roof, Southwest Corner Parapet Cap
BIO-PB025	Black Paint on Metal	0.28%	Exterior, West Side I-Beam Column
BIO-PB026	White Paint on Wood	0.82%	Exterior, West Side Eave Joist
BIO-PB027	Red Paint on Wood	<0.0081%	Exterior, South Box
BIO-PB029	White Paint on Metal	<0.0081%	Room 29, Exhaust Hood
Chemical Storage Building			
CSB-PB-101	Grey Paint on Metal Door	<0.007%	Ante-Chamber, Flammables Door
CSB-PB-102	Beige Paint on Wallboard	<0.007%	Ante-Chamber, Wall Between Hazardous and Flammable Storage Doors
Chiller Unit			
CE-PB-101	Grey Metal Chiller Component	0.88%	Near Entry, Chiller Component
Physical Sciences Building South			
PSBS-PB01	Baby Blue Paint on Plaster	<0.006%	Physical Sciences Building South, Corridor, South Wall
PSBS-PB02	Light Orange Paint on Plaster	0.96%	Physical Sciences Building South, Room PS-8, West Wall
PSBS-PB03	Off-White Paint on Plaster	0.10%	Physical Sciences Building South, Room PS-17, West Wall
PSBS-PB04	Orange Paint on Plaster	1.9%	Physical Sciences Building South, Room PS-12, South Wall
PSBS-PB05	Dark Blue Paint on Drywall	0.11%	Physical Sciences Building South, Room PS-19, North Wall
PSBS-PB06	Brown Paint on Metal	0.38%	Physical Sciences Building South, Room PS-5, North Wall
PSBS-PB07	Baby Blue Paint on Metal	0.32%	Physical Sciences Building South, Room PS-5, North Wall
PSBS-PB08	Brown Paint on Plaster	0.26%	Physical Sciences Building South, Room PS-2, North Wall
PSBS-PB09	Black Paint on Glass	0.012%	Physical Sciences Building South, Room PS-19, Northwest Wall
PSBS-PB10	Red Paint on Metal	0.029%	Physical Sciences Building South, Room PS-5, Southwest Wall
PSBS-PB11	Off-White Paint on Metal	0.039%	Physical Sciences Building South, Room PS-2, East Wall
PSBS-PB12	Off-White Paint on Drywall	0.32%	Physical Sciences Building South, Room PS-1, South Wall
PSBS-PB13	Green Paint on Metal Window Frame	5.5%	Physical Sciences Building South, Room PS-5, North Wall

PSBS-PB14	Green Paint on Wood Wall	0.090%	Physical Sciences Building South, Room PS-5, North Wall
PSBS-PB15	Baby Blue Paint on Wood Baseboard	0.57%	Physical Sciences Building South, Room PS-6, North Wall
PSBS-PB16	Brown Paint on Wood Baseboard	0.97%	Physical Sciences Building South, Room PS-8, North Wall
PSBS-PB17	Off-White Paint on Wood Baseboard	0.29%	Physical Sciences Building South, Room PS-10, South Wall
PSBS-PB18	Light Brown Paint on Wood Cabinet	0.013%	Physical Sciences Building South, Room PS-6, Cabinet
PSBS-PB19	Dark Blue Paint on Metal Door Frame	0.34%	Physical Sciences Building South, Room PS-19, Room-108
PSBS-PB20	Black Paint on Metal Door	0.11%	Physical Sciences Building South, Room PS-19, Room 108
PSBS-PB21	Orange Paint on Metal HVAC Unit	8.5%	Physical Sciences Building South, Room PS-5, North on Hood
PSBS-PB22	Light Orange Paint on Transite Exhaust Hood	0.47%	Physical Sciences Building South, Room PS-6, South Side
PSBS-PB23	Dark Blue Paint on Transite Exhaust Hood	0.020%	Physical Sciences Building South, Room PS-14, South Wall
PSBS-PB24	Dark Brown Paint on Metal Post	3.2%	Physical Sciences Building South, Room PS-6, South Wall
PSBS-PB25	White Paint on Stucco Wall	0.19%	Exterior, Physical Sciences Building South, Southeast Area
PSBS-PB26	Brown Paint on Metal Door	2.5%	Exterior, Physical Sciences Building South, North Center Area
PSBS-PB27	Blue Paint on Metal Post	0.008%	Exterior, Physical Sciences Building South, East Center Area
Boiler Room Building			
BR-01-P	Pink Paint on Concrete Wall	0.11%	Interior, West Wall, Center
BR-02-P	Blue Paint on Metal Transformer	<0.006%	Interior, Transformer Stand, Southwest Corner
BR-03-P	Brick Red Paint on Metal Door	1.4%	Interior, Boiler Room, Entry Door, Southwest Area
BR-04-P	Brick Red Paint on Metal Pipe	1.2%	Exterior, Boiler Room, Southwest Corner, Pipe
BR-05-P	Fire Red Paint on Metal Control Panel	<0.007%	Interior, Boiler Room, South Wall, Control Panel
BR-06-P	Ferrari Red Paint on Metal Pipe Flange	0.078%	Interior, Boiler Room, Northwest Corner, Pipe Flange
BR-07-P	Yellow Paint on Metal Pipe	0.019%	Interior, Boiler Room, West Wall, Pipe Adjacent to Entry
BR-08-P	Blue Paint on Thermal System Insulation	0.18%	Interior, Boiler Room, Southeast Area, Thermal System Insulation on Pipe
BR-09-P	Blue Paint on Metal Door Frame	1.4%	Interior, Boiler Room, Northeast Entry, Door Frame
BR-10-P	Gray Paint on Pipe	<0.007%	Interior, Boiler Room, Southwest Area Adjacent to Entry
BR-11-P	Gray Paint on Pipe	0.007%	Exterior, Boiler Room, Northeast Area, Gas Meter

BR-12-P	Gray Paint on Pedestal	0.19%	Interior, Boiler Room, Northeast Area, Pedestal
Physical Sciences Building North			
PSBN-PB001	White Paint on Drywall	<0.007%	Physical Sciences Building North, Room PS-109, West Wall
PSBN-PB002	Gray Paint on Metal Door Frame	<0.006%	Physical Sciences Building North, Room PS-109, Entrance
PSBN-PB004	Beige Paint on Wood Trim	<0.006%	Physical Sciences Building North, Corridor 1, Above Entrance
PSBN-PB005	Gray Paint on Metal Handrail	0.089%	Physical Sciences Building North, Corridor 1, Center
PSBN-PB007	Red Paint on Metal Duct	0.032%	Physical Sciences Building North, Room PS-113, South
PSBN-PB008	Baby Blue Paint on Drywall	<0.007%	Physical Sciences Building North, Room PS-113, North Wall
PSBN-PB009	Black Paint on Metal Door Frame	0.32%	Physical Sciences Building North, Room PS-123, Door Frame
PSBN-PB010	White Paint on Metal Door Frame	0.032%	Physical Sciences Building North, Room PS-118, Door Frame
PSBN-PB011	Gray Paint on Wood Wall	<0.006%	Physical Sciences Building North, Room PS-118, Wall
PSBN-PB012	White Paint on Wood Trim	<0.006%	Physical Sciences Building North, Room PS-118, Near Ceiling
PSBN-PB013	Yellow Paint on Metal Fixture	1.9%	Physical Sciences Building North, Room PS-113, On Light Fixture
PSBN-PB014	Baby Blue Paint on Wood Trim	<0.006%	Physical Sciences Building North, Room PS-106, North Wall
PSBN-PB015	Brown Paint on Metal Door Frame	0.20%	Physical Sciences Building North, Room PS-106, Door Frame
PSBN-PB016	Black Paint on Drywall	<0.007%	Physical Sciences Building North, Room PS-132 Lecture Hall, Above Ceiling
PSBN-PB017	Brown Ceramic Floor Tile	<0.006%	Physical Sciences Building North, Women's Restroom, South Wall
PSBN-PB019	Red Ceramic Wall Tile	0.008%	Physical Sciences Building North, Women's Restroom, South Wall
PSBN-PB020	Yellow Paint on Drywall	0.034%	Physical Sciences Building North, Room 130, Northwest Corner
PSBN-PB021	Black Paint on Wood Wall	<0.006%	Physical Sciences Building North, Room Exploratorium, 132 Entrance
PSBN-PB022	Red Paint on Metal Beam	0.028%	Physical Sciences Building North, Corridor, Above Ceiling Beam
PSBN-PB023	Brown Paint on Metal Gutter	<0.007%	Physical Sciences Building North, Roof F, West Area
PSBN-PB024	Red Paint on Metal Dome Joint	<0.007%	Physical Sciences Building North, Roof G, Southwest Area
PSBN-PB025	Red Paint on Wood Dome Siding	<0.006%	Physical Sciences Building North, Roof G, Southwest Area
PSBN-PB026	Black Paint on Wood Cabinet Door	<0.007%	Physical Sciences Building North, Roof J, South Area
PSBN-PB027	Brown Paint on Metal Rail	0.12%	Physical Sciences Building North, Roof J, South Area

PSBN-PB028	Black Paint on Metal Door	0.018%	Physical Sciences Building North, North Area, North Door
Analytical Methods: EPA SW-846 Method 7420 and EPA 3050B/7000B < = Below Analytical Limit of Detection			



Bulk Asbestos Analysis

(EPA Method 40CFR, Part 763, Appendix E to Subpart E and EPA 600/R-93-116, Visual Area Estimation)

NVLAP Lab Code: 101459-0

Forensic Analytical Consulting Svcs
Gary Lowe
21228 Cabot Blvd.

Hayward, CA 94545

Client ID: HAY01
Report Number: B318551
Date Received: 05/28/21
Date Analyzed: 06/04/21
Date Printed: 06/04/21
First Reported: 06/04/21

Job ID/Site: PJ63338; Critical Solutions, Inc.

SGSFL Job ID: HAY01
Total Samples Submitted: 18
Total Samples Analyzed: 18

Date(s) Collected: 05/28/2021

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
CSB-01	12429061						
Layer: White Drywall			ND				
Layer: White Joint Compound			ND				
Layer: White Tape			ND				
Layer: White Joint Compound			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (20 %)	Fibrous Glass (10 %)						
CSB-02	12429062						
Layer: White Drywall			ND				
Layer: White Joint Compound			ND				
Layer: White Tape			ND				
Layer: White Joint Compound			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (20 %)	Fibrous Glass (10 %)						
CSB-03	12429063						
Layer: Black Non-Fibrous Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
CSB-04	12429064						
Layer: Black Non-Fibrous Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
CSB-05	12429065						
Layer: White Non-Fibrous Material			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							

Client Name: Forensic Analytical Consulting Svcs

Report Number: B318551

Date Printed: 06/04/21

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
CSB-06	12429066						
Layer: White Non-Fibrous Material			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
CSB-07	12429067						
Layer: Brown Semi-Fibrous Material			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace) Fibrous Glass (10 %)							
CSB-08	12429068						
Layer: Brown Semi-Fibrous Material			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace) Fibrous Glass (10 %)							
CSB-09	12429069						
Layer: Grey Mortar			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
CSB-10	12429070						
Layer: Grey Mortar			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
CSB-11	12429071						
Layer: Grey Cementitious Material			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
CSB-12	12429072						
Layer: Grey Cementitious Material			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							

Client Name: Forensic Analytical Consulting Svcs

Report Number: B318551

Date Printed: 06/04/21

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
CSB-13	12429073						
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (10 %)	Fibrous Glass (55 %)						
Comment: Bulk complex sample.							
CSB-14	12429074						
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (10 %)	Fibrous Glass (55 %)						
Comment: Bulk complex sample.							
CSB-15	12429075						
Layer: Stones			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (55 %)	Fibrous Glass (10 %)						
Comment: Bulk complex sample.							

Client Name: Forensic Analytical Consulting Svcs

Report Number: B318551

Date Printed: 06/04/21

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
CSB-16	12429076						
Layer: Stones			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (5 %) Fibrous Glass (10 %) Synthetic (55 %)							
Comment: Bulk complex sample.							
CSB-17	12429077						
Layer: Grey Non-Fibrous Material			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
CSB-18	12429078						
Layer: Grey Non-Fibrous Material			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							



Tad Thrower, Laboratory Supervisor, Hayward Laboratory

Note: Limit of Quantification ('LOQ') = 1%. 'Trace' denotes the presence of asbestos below the LOQ. 'ND' = 'None Detected'.

Analytical results and reports are generated by SGS Forensic Laboratories (SGSFL) at the request of and for the exclusive use of the person or entity (client) named on such report. Results, reports or copies of same will not be released by SGSFL to any third party without prior written request from client. This report applies only to the sample(s) tested. Supporting laboratory documentation is available upon request. This report must not be reproduced except in full, unless approved by SGSFL. The client is solely responsible for the use and interpretation of test results and reports requested from SGSFL. SGSFL is not able to assess the degree of hazard resulting from materials analyzed. SGS Forensic Laboratories reserves the right to dispose of all samples after a period of thirty (30) days, according to all state and federal guidelines, unless otherwise specified. All samples were received in acceptable condition unless otherwise noted.

Sampling Data Form / Chain of custody

Client: HA/01
 FACS: San Francisco, CA Office
 Critical Solutions, Inc.

Site: Contra Costa College 2600 Mission Bell Drive San Pablo, CA USA

Sampled By: Radzinski
 Sample Date: 28 May 2021
 Proj #: PJ63338

Turnaround Time: RUSH 24hr 48hr Extended (5 days)

Analysis: PLM Standard: _____ PLM w/ Point Count: (_____ 400pt. _____ 1,000 pt.):

Email results to: FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com

NOTES: please halt analyses @ 1st positive for each homogeneous material

HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I./Cat II.	Condition	Sample #	Sample Location	Lab result
01	T51, straight run				CE-01	NE quadrant, north chiller line end east end of E-W run	
01	T51, straight run				CE-02	NE quadrant, south north chiller line, north end of N-S run	
01	T51, straight run				CE-03	NW quadrant, north chiller line, east of valve	
02	T51, valve jacket				CE-04	NW quadrant, north chiller line, valve jacket	
03	T51				CE-05	W. side, pump manifold	
04	packing				CE-06	corrugated ce roof panel and joist	
04	packing				CE-07	corrugated roof panel and joist	
02	T51				CE-08	pipe elbow above west pump	

drywall, JC = Joint Compound, WT=Wall Texture, VFT = Vinyl Floor Tile, VSF = Vinyl Sheet Flooring, BB = Baseboard, BBM = Baseboard Mastic, CM = Carpet Mastic, ACT = Acoustic Ceiling Tile, ACS = Sprayed-on Acoustic Material, FP = Fireproofing, PI = Pipe Insulation, PFI = Pipe fitting insulation, WP = Plaster, CP = Ceiling Plaster, ES = Exterior Stucco

Relinquished by: Radzinski
 Date and Time: 28 May 2021 / 1515

Relinquished by: _____
 Date and Time: _____

Relinquished by: _____
 Date and Time: _____



Sampling Data Form / Chain of custody

Client: HAY01
FACS: San Francisco, CA Office
 Critical Solutions, Inc.

Site: Contra Costa College 2600 Mission Bell Drive San Pablo, CA USA

Sampled By: *Redzinski*
Sample Date: *28 May 2021*
Proj #: PJ63338

Turnaround Time: RUSH 24hr 48hr Extended (5 days)

Analysis: PLM Standard: _____ PLM w/ Point Count: (_____ 400pt. _____ 1,000 pt.):

Email results to: FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com

Please halt analysis @ 1st & positive for each homogeneous material

HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I./Cat II.	Condition	Sample #	Sample Location	Lab result
<i>06</i>	<i>concrete</i>				<i>CE-09</i>	<i>exterior, SW corner, pad</i>	
<i>06</i>	<i>concrete</i>				<i>CE-10</i>	<i>exterior, NW corner, pad</i>	
<i>(A)</i>							
<i>(A)</i>							

DW = Drywall, JC = Joint Compound, WT=Wall Texture, VFT = Vinyl Floor Tile, VSF = Vinyl Sheet Flooring, BB = Baseboard, BBM = Baseboard Mastic, CM = Carpet Mastic, ACT = Acoustic Ceiling Tile, ACS = Sprayed-on Acoustic Ceiling Material, FP = Fireproofing, PI = Pipe Insulation, PFI = Pipe fitting insulation, WP = Plaster, CP = Ceiling Plaster, ES = Exterior Stucco

Relinquished by: *Redzinski*
Date and Time: *28 May 2021 / 1515*

Relinquished by:
Date and Time:

Relinquished by:
Date and Time:

Received by:
Date and Time:

Received by:
Date and Time:

Received by:
Date and Time:





Bulk Asbestos Analysis

(EPA Method 40CFR, Part 763, Appendix E to Subpart E and EPA 600/R-93-116, Visual Area Estimation)
NVLAP Lab Code: 101459-0

Forensic Analytical Consulting Svcs
Gary Lowe
21228 Cabot Blvd.

Hayward, CA 94545

Client ID: HAY01
Report Number: B318552
Date Received: 05/28/21
Date Analyzed: 06/04/21
Date Printed: 06/04/21
First Reported: 06/04/21

Job ID/Site: PJ63338; Critical Solutions, Inc.

SGSFL Job ID: HAY01
Total Samples Submitted: 10
Total Samples Analyzed: 10

Date(s) Collected: 05/28/2021

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
CE-01	12429079						
Layer: Yellow Fibrous Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace) Fibrous Glass (99 %)							
CE-02	12429080						
Layer: Yellow Fibrous Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace) Fibrous Glass (99 %)							
CE-03	12429081						
Layer: Yellow Fibrous Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace) Fibrous Glass (99 %)							
CE-04	12429082						
Layer: Yellow Fibrous Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace) Fibrous Glass (99 %)							
CE-05	12429083						
Layer: Black Foam			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
CE-06	12429084						
Layer: Black Foam			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
CE-07	12429085						
Layer: Black Foam			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							

Client Name: Forensic Analytical Consulting Svcs

Report Number: B318552

Date Printed: 06/04/21

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
CE-08	12429086						
Layer: Yellow Fibrous Material			ND				
Layer: Tan Fibrous Material			ND				
Layer: Silver Foil			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (10 %)	Fibrous Glass (90 %)						
CE-09	12429087						
Layer: Grey Cementitious Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
CE-10	12429088						
Layer: Grey Cementitious Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							



Tad Thrower, Laboratory Supervisor, Hayward Laboratory

Note: Limit of Quantification ('LOQ') = 1%. 'Trace' denotes the presence of asbestos below the LOQ. 'ND' = 'None Detected'.

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Sampling Data Form / Chain of custody

Client: HA/01
 FACS: San Francisco, CA Office
 Critical Solutions, Inc.

Site: Contra Costa College 2600 Mission Bell Drive San Pablo, CA USA

Sampled By: Radzinski
 Sample Date: 28 May 2021
 Proj #: PJ63338

Turnaround Time: RUSH 24hr 48hr Extended (5 days)

Analysis: PLM Standard: _____ PLM w/ Point Count: (_____ 400pt. _____ 1,000 pt.):

Email results to: FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com

NOTE: please halt analyses @ 1st positive for each homogeneous material

HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I./Cat II.	Condition	Sample #	Sample Location	Lab result
01	T51, straight run				CE-01	NE quadrant, north chiller line east end of E-W run	
01	T51, straight run				CE-02	NE quadrant, south north chiller line, north end of N-S run	
01	T51, straight run				CE-03	NW quadrant, north chiller line, east of valve	
02	T51, valve jacket				CE-04	NW quadrant, north chiller line, valve jacket	
03	T51				CE-05	W. side, pump manifold	
04	packing				CE-06	corrugated ce roof panel and joist	
04	packing				CE-07	corrugated roof panel and joist	
02	T51				CE-08	pipe elbow above west pump	

drywall, JC = Joint Compound, WT=Wall Texture, VFT = Vinyl Floor Tile, VSF = Vinyl Sheet Flooring, BB = Baseboard, BBM = Baseboard Mastic, CM = Carpet Mastic, ACT = Acoustic Ceiling Tile, ACS = Sprayed-on Acoustic Material, FP = Fireproofing, PI = Pipe Insulation, PFI = Pipe fitting insulation, WP = Plaster, CP = Ceiling Plaster, ES = Exterior Stucco

Relinquished by: Radzinski
 Date and Time: 28 May 2021 / 1515

Relinquished by: _____
 Date and Time: _____

Relinquished by: _____
 Date and Time: _____



Sampling Data Form / Chain of custody

Client: HAY01
FACS: San Francisco, CA Office
 Critical Solutions, Inc.

Site: Contra Costa College 2600 Mission Bell Drive San Pablo, CA USA

Sampled By: *Redzinski*
Sample Date: *28 May 2021*
Proj #: PJ63338

Turnaround Time: RUSH 24hr 48hr Extended (5 days)

Analysis: PLM Standard: _____ PLM w/ Point Count: (_____ 400pt. _____ 1,000 pt.):

Email results to: FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com

Please halt analysis @ 1st & positive for each homogeneous material

HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I./Cat II.	Condition	Sample #	Sample Location	Lab result
<i>06</i>	<i>concrete</i>				<i>CE-09</i>	<i>exterior, SW corner, pad</i>	
<i>06</i>	<i>concrete</i>				<i>CE-10</i>	<i>exterior, NW corner, pad</i>	
<i>(A)</i>							
<i>(A)</i>							

DW = Drywall, JC = Joint Compound, WT=Wall Texture, VFT = Vinyl Floor Tile, VSF = Vinyl Sheet Flooring, BB = Baseboard, BBM = Baseboard Mastic, CM = Carpet Mastic, ACT = Acoustic Ceiling Tile, ACS = Sprayed-on Acoustic Ceiling Material, FP = Fireproofing, PI = Pipe Insulation, PFI = Pipe fitting insulation, WP = Plaster, CP = Ceiling Plaster, ES = Exterior Stucco

Relinquished by: *Redzinski*
Date and Time: *28 May 2021 / 1515*

Relinquished by:
Date and Time:

Relinquished by:
Date and Time:

Received by:
Date and Time:

Received by:
Date and Time:

Received by:
Date and Time:



MICRO ANALYTICAL LABORATORIES, INC.
BULK ASBESTOS ANALYSIS - POLARIZED LIGHT MICROSCOPY (PLM)



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 Gary Lowe
 Forensic Analytical Consulting
 21228 Cabot Boulevard
 Hayward, CA 94545

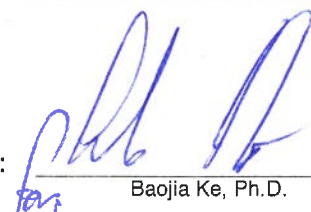
PROJECT:
PROJECT NO. PJ63338
BIOLOGICAL SCIENCE BUILDING
CONTRA COSTA COLLEGE
2600 MISSION BELL DRIVE
SAN PABLO, CA

Micro Log In **281877**
 Total Samples 144
 Date Sampled 05/24/2021
 Date Received 06/02/2021
 Date Analyzed 06/02/2021

SAMPLE IDENTIFICATION**ASBESTOS QUANTITY (AREA %) / TYPES / LAYERS****DOMINANT
OTHER MATERIALS**

If absent, ND Is Reported (No Asbestos Detected)

Client #: BIO-A001 Micro #: 281877-01 Analyst: JM GR TAN SHEET FLOORING WITH MOTTLE PATTERN ROOM 18 SOUTHEAST CORNER	SHEET FLOORING: ND BACKING / MASTIC: 25% CHRYSOTILE ASBESTOS	5 % CELLULOSE NFM: SYNTHETIC MATERIAL, CARBONATE.
Client #: BIO-A002 Micro #: 281877-02 Analyst: TAN SHEET FLOORING WITH MOTTLE PATTERN ROOM 18 NORTHWEST CORNER	NOT ANALYZED (PRIOR POSITIVE)	NFM:
Client #: BIO-A003 Micro #: 281877-03 Analyst: JM GR BEIGE SHEET FLOORING WITH MOTTLE PATTERN ROOM 18 WEST SIDE POTHOLE ON FLOOR	SHEET FLOORING / BACKING: ND MASTIC: ND	15 % FIBROUS GLASS 5 % SYNTHETIC FIBERS NFM: SYNTHETIC MATERIAL, CARBONATE, ADHESIVE.
Client #: BIO-A004 Micro #: 281877-04 Analyst: JM BEIGE SHEET FLOORING WITH MOTTLE PATTERN ROOM 2 EAST SIDE	SHEET FLOORING / BACKING: ND MASTIC: ND CONCRETE: ND	15 % FIBROUS GLASS 5 % SYNTHETIC FIBERS NFM: SYNTHETIC MATERIAL, CARBONATE, ADHESIVE.
Client #: BIO-A005 Micro #: 281877-05 Analyst: JM WHITE ADHESIVE ON METAL HVAC PINS - ROOM 16	ND	25 % FIBROUS GLASS NFM: RESILIENT ORGANICALLY BOUND MATERIALS, MISC. PARTICLES

Technical Supervisor: 

Baojia Ke, Ph.D.

6/4/2021

Date Reported

NVLAP Lab Code 101872-0 (TESTING). Analyses use Polarized Light Microscopy (PLM), Micro Analytical SOP PLM-101. Basic techniques follow EPA - Appendix E to Subpart E of 40 CFR Part 763; Interim Method for the Determination of Asbestos in Bulk Insulation Samples" (originally published 1982), and EPA-600/R93-116 (1993). The 1993 method covers all types of bulk materials and is based on the 1982 Method, with improved analytical techniques for layered samples as required for NESHAP compliance. Asbestos is quantified by calibrated visual estimation. Detection limit is material dependent. Detection of asbestos traces (much less than 1%) may not be reliable or reproducible by PLM. Weight % cannot be determined by PLM. Asbestos with diameter below ~1 µm may not be detected by PLM. Absence of asbestos in dust, debris, and some compact materials, including floor tiles, cannot be conclusively established by PLM, and should be confirmed by Transmission Electron Microscopy (TEM). Interferences may prevent detection of small asbestos fibers, and hinder determination of some optical properties. Tremolite-asbestos or actinolite-asbestos may be indistinguishable by PLM from some similar, non-regulated amphiboles (e.g. the "Libby Amphiboles" richterite and winchite), and should be confirmed by TEM. The lower quantitation limit (reporting limit) of PLM estimation is 1%. The Cal-OSHA definition of asbestos-containing construction material is 0.1% asbestos; however, reliable determination of asbestos percent at this level cannot be done by PLM estimation; PLM Point Counting or TEM weight percent analysis are recommended. Only dominant non-asbestos materials (fibrous and non-fibrous) are listed. This analysis shall not be construed as conclusive for the presence of any reported materials other than asbestos, or for the absence of any non-asbestos material. Common interferences include, but are not limited to: cellulose, fibrous glass, other man-made vitreous fibers, synthetic fibers, elongate fragments of calcium sulfate, talc, wollastonite, animal hair, and other miscellaneous elongate particles. Sample heterogeneity is indicated by listing more than one distinct layer or material on the report. If more than one distinct sample is received in the same container, samples shall be marked with letters and analyzed separately. Layers within a sample are analyzed separately when feasible; if asbestos is detected, percentages are reported for individual layers. Interlayer contamination is possible among any layers in a sample. The notation ND (or "NONE DETECTED") indicates a result of "NO ASBESTOS DETECTED" in a homogeneous sample, or in a layer of a heterogeneous sample. Composite asbestos percentages from multiple layers are applicable only to wallboard / joint compound systems; compositing is based on customers' descriptions of material as "joint compound". Customers are solely responsible for identification and description of bulk materials listed on field forms. Laboratory descriptions may differ from those given by customers. Quality Control (QC): all results have been determined to be within acceptance limits prior to reporting. Reanalyzed samples are denoted by two sets of analyst initials. Unless otherwise stated herein, all samples were received in acceptable condition for analysis. This report must not be used to claim product endorsement by NIST or any U.S. Government agency. This report shall not be reproduced except in full, without the approval of Micro Analytical Laboratories, Inc., and pertains only to the samples analyzed as received. NFM = Non-fibrous materials.

MICRO ANALYTICAL LABORATORIES, INC.
BULK ASBESTOS ANALYSIS - POLARIZED LIGHT MICROSCOPY (PLM)



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 Forensic Analytical Consulting
 21228 Cabot Boulevard
 Hayward, CA 94545

PROJECT:
PROJECT NO. PJ63338
BIOLOGICAL SCIENCE BUILDING
CONTRA COSTA COLLEGE
2600 MISSION BELL DRIVE
SAN PABLO, CA

Micro Log In **281877**
 Total Samples 144
 Date Sampled 05/24/2021
 Date Received 06/02/2021
 Date Analyzed 06/02/2021

SAMPLE IDENTIFICATION	ASBESTOS QUANTITY (AREA %) / TYPES / LAYERS	DOMINANT OTHER MATERIALS
-----------------------	---	--------------------------

If absent, ND Is Reported (No Asbestos Detected)

Client #: BIO-A006 Micro #: 281877-06 Analyst: JM WHITE ADHESIVE ON METAL HVAC PINS - ROOM 16	ADHESIVE: ND	25 % FIBROUS GLASS NFM: RESILIENT ORGANICALLY BOUND MATERIALS, MISC. PARTICLES
Client #: BIO-A007 Micro #: 281877-07 Analyst: JM GRAY HVAC SEAM MASTIC ROOM 16	ND	NFM: RESILIENT ORGANICALLY BOUND MATERIALS, MISC. PARTICLES
Client #: BIO-A008 Micro #: 281877-08 Analyst: JM GRAY HVAC SEAM MASTIC ROOM 17	ND	NFM: RESILIENT ORGANICALLY BOUND MATERIALS, MISC. PARTICLES
Client #: BIO-A009 Micro #: 281877-09 Analyst: JM 2" X 4" WHITE ACOUSTICAL CEILING TILE WITH FISSURE PATTERN - ROOM 18	CEILING TILE: ND PAINT: ND	45 % CELLULOSE NFM: PERLITE
Client #: BIO-A010 Micro #: 281877-10 Analyst: JM 2" X 4" WHITE ACOUSTICAL CEILING TILE WITH FISSURE PATTERN CORRIDOR EAST WALL ON SOUTH END	CEILING TILE: ND PAINT: ND	45 % CELLULOSE NFM: PERLITE

Technical Supervisor:

Baojia Ke, Ph.D.

6/4/2021

Date Reported

NVLAP Lab Code 101872-0 (TESTING). Analyses use Polarized Light Microscopy (PLM), Micro Analytical SOP PLM-101. Basic techniques follow EPA – Appendix E to Subpart E of 40 CFR Part 763; Interim Method for the Determination of Asbestos in Bulk Insulation Samples" (originally published 1982), and EPA-800/R93-116 (1993). The 1993 method covers all types of bulk materials and is based on the 1982 Method, with improved analytical techniques for layered samples as required for NESHAP compliance. Asbestos is quantified by calibrated visual estimation. Detection limit is material dependent. Detection of asbestos traces (much less than 1%) may not be reliable or reproducible by PLM. Weight % cannot be determined by PLM. Asbestos with diameter below ~1 µm may not be detected by PLM. Absence of asbestos in dust, debris, and some compact materials, including floor tiles, cannot be conclusively established by PLM, and should be confirmed by Transmission Electron Microscopy (TEM). Interferences may prevent detection of small asbestos fibers, and hinder determination of some optical properties. Tremolite-asbestos or actinolite-asbestos may be indistinguishable by PLM from some similar, non-regulated amphiboles (e.g. the "Libby Amphiboles" richterite and winchite), and should be confirmed by TEM. The lower quantitation limit (reporting limit) of PLM estimation is 1%. The Cal-OSHA definition of asbestos-containing construction material is 0.1% asbestos; however, reliable determination of asbestos percent at this level cannot be done by PLM estimation; PLM Point Counting or TEM weight percent analysis are recommended. Only dominant non-asbestos materials (fibrous and non-fibrous) are listed. This analysis shall not be construed as conclusive for the presence of any reported materials other than asbestos, or for the absence of any non-asbestos material. Common interferences include, but are not limited to: cellulose, fibrous glass, other man-made vitreous fibers, synthetic fibers, elongate fragments of calcium sulfate, talc, wollastonite, animal hair, and other miscellaneous elongate particles. Sample heterogeneity is indicated by listing more than one distinct layer or material on the report. If more than one distinct sample is received in the same container, samples shall be marked with letters and analyzed separately. Layers within a sample are analyzed separately when feasible; if asbestos is detected, percentages are reported for individual layers. Interlayer contamination is possible among any layers in a sample. The notation ND (or "NONE DETECTED") indicates a result of "NO ASBESTOS DETECTED" in a homogeneous sample, or in a layer of a heterogeneous sample. Composite asbestos percentages from multiple layers are applicable only to wallboard / joint compound systems; compositing is based on customers' descriptions of material as "joint compound". Customers are solely responsible for identification and description of bulk materials listed on field forms. Laboratory descriptions may differ from those given by customers. Quality Control (QC): all results have been determined to be within acceptance limits prior to reporting. Reanalyzed samples are denoted by two sets of analyst initials. Unless otherwise stated herein, all samples were received in acceptable condition for analysis. This report must not be used to claim product endorsement by NIST or any U.S. Government agency. This report shall not be reproduced except in full, without the approval of Micro Analytical Laboratories, Inc., and pertains only to the samples analyzed as received. NFM = Non-fibrous materials.

MICRO ANALYTICAL LABORATORIES, INC.
BULK ASBESTOS ANALYSIS - POLARIZED LIGHT MICROSCOPY (PLM)



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 Forensic Analytical Consulting
 21228 Cabot Boulevard
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PROJECT:
PROJECT NO. PJ63338
BIOLOGICAL SCIENCE BUILDING
CONTRA COSTA COLLEGE
2600 MISSION BELL DRIVE
SAN PABLO, CA

Micro Log In **281877**
 Total Samples 144
 Date Sampled 05/24/2021
 Date Received 06/02/2021
 Date Analyzed 06/02/2021

SAMPLE IDENTIFICATION	ASBESTOS QUANTITY (AREA %) / TYPES / LAYERS	DOMINANT OTHER MATERIALS
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If absent, ND is Reported (No Asbestos Detected)

Client #: BIO-A011 Micro #: 281877-11 Analyst: JM BLACK WITH GRAY STREAKS FLOOR MATS - ROOM 16	ND	45 % CELLULOSE NFM: RESILIENT ORGANICALLY BOUND MATERIALS, MISC. PARTICLES
Client #: BIO-A012 Micro #: 281877-12 Analyst: JM BLACK WITH GRAY STREAKS FLOOR MATS - ROOM 16	ND	45 % CELLULOSE NFM: RESILIENT ORGANICALLY BOUND MATERIALS, MISC. PARTICLES
Client #: BIO-A013 Micro #: 281877-13 Analyst: JM GR JOINT COMPOUND / WB ROOM 18 SOUTHEAST CORNER WALL	COMPOSITE DW & JC: <1% CHRYSOTILE ASBESTOS DRYWALL: ND JOINT COMPOUND: 2% CHRYSOTILE ASBESTOS TAPE / PAINT: ND	15 % CELLULOSE 5 % FIBROUS GLASS NFM: 'GYPSUM' (CALCIUM SULFATE), CARBONATE.
Client #: BIO-A014 Micro #: 281877-14 Analyst: JM JOINT COMPOUND / WB ROOM 26 SOUTHEAST CORNER	COMPOSITE DW & JC: <1% CHRYSOTILE ASBESTOS DRYWALL: ND JOINT COMPOUND: 2% CHRYSOTILE ASBESTOS TAPE / PAINT: ND	15 % CELLULOSE 5 % FIBROUS GLASS NFM: 'GYPSUM' (CALCIUM SULFATE), CARBONATE.
Client #: BIO-A015 Micro #: 281877-15 Analyst: JM JOINT COMPOUND / WB ROOM 3 BOILER ROOM	COMPOSITE DW & JC: <1% CHRYSOTILE ASBESTOS DRYWALL: ND JOINT COMPOUND: 2% CHRYSOTILE ASBESTOS TAPE / PAINT: ND	15 % CELLULOSE 5 % FIBROUS GLASS NFM: 'GYPSUM' (CALCIUM SULFATE), CARBONATE.

Technical Supervisor: 

Baojia Ke, Ph.D.

6/4/2021

Date Reported

NVLAP Lab Code 101872-0 (TESTING). Analyses use Polarized Light Microscopy (PLM), Micro Analytical SOP PLM-101. Basic techniques follow EPA - Appendix E to Subpart E of 40 CFR Part 763; Interim Method for the Determination of Asbestos in Bulk Insulation Samples" (originally published 1982), and EPA-800/R93-116 (1993). The 1993 method covers all types of bulk materials and is based on the 1982 Method, with improved analytical techniques for layered samples as required for NESHAP compliance. Asbestos is quantified by calibrated visual estimation. Detection limit is material dependent. Detection of asbestos traces (much less than 1%) may not be reliable or reproducible by PLM. Weight % cannot be determined by PLM. Asbestos with diameter below ~1 µm may not be detected by PLM. Absence of asbestos in dust, debris, and some compact materials, including floor tiles, cannot be conclusively established by PLM, and should be confirmed by Transmission Electron Microscopy (TEM). Interferences may prevent detection of small asbestos fibers, and hinder determination of some optical properties. Tremolite-asbestos or actinolite-asbestos may be indistinguishable by PLM from some similar, non-regulated amphiboles (e.g. the "Libby Amphiboles" richterite and winchite), and should be confirmed by TEM. The lower quantitation limit (reporting limit) of PLM estimation is 1%. The Cal-OSHA definition of asbestos-containing construction material is 0.1% asbestos; however, reliable determination of asbestos percent at this level cannot be done by PLM estimation; PLM Point Counting or TEM weight percent analysis are recommended. Only dominant non-asbestos materials (fibrous and non-fibrous) are listed. This analysis shall not be construed as conclusive for the presence of any reported materials other than asbestos, or for the absence of any non-asbestos material. Common interferences include, but are not limited to: cellulose, fibrous glass, other man-made vitreous fibers, synthetic fibers, elongate fragments of calcium sulfate, talc, wollastonite, animal hair, and other miscellaneous elongate particles. Sample heterogeneity is indicated by listing more than one distinct layer or material on the report. If more than one distinct sample is received in the same container, samples shall be marked with letters and analyzed separately. Layers within a sample are analyzed separately when feasible; if asbestos is detected, percentages are reported for individual layers. Interlayer contamination is possible among any layers in a sample. The notation ND (or "NONE DETECTED") indicates a result of "NO ASBESTOS DETECTED" in a homogeneous sample, or in a layer of a heterogeneous sample. Composite asbestos percentages from multiple layers are applicable only to wallboard / joint compound systems; compositing is based on customers' descriptions of material as "joint compound". Customers are solely responsible for identification and description of bulk materials listed on field forms. Laboratory descriptions may differ from those given by customers. Quality Control (QC): all results have been determined to be within acceptance limits prior to reporting. Reanalyzed samples are denoted by two sets of analyst initials. Unless otherwise stated herein, all samples were received in acceptable condition for analysis. This report must not be used to claim product endorsement by NIST or any U.S. Government agency. This report shall not be reproduced except in full, without the approval of Micro Analytical Laboratories, Inc., and pertains only to the samples analyzed as received. NFM = Non-fibrous materials.

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BULK ASBESTOS ANALYSIS - POLARIZED LIGHT MICROSCOPY (PLM)



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 21228 Cabot Boulevard
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PROJECT:
PROJECT NO. PJ63338
BIOLOGICAL SCIENCE BUILDING
CONTRA COSTA COLLEGE
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Micro Log In **281877**
 Total Samples 144
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SAMPLE IDENTIFICATION

ASBESTOS QUANTITY (AREA %) / TYPES / LAYERS

DOMINANT
OTHER MATERIALS

If absent, ND Is Reported (No Asbestos Detected)

Client #: BIO-A016 Micro #: 281877-16 Analyst: JM JOINT COMPOUND / WB JANITOR CLOSET NEXT TO ROOM 7	COMPOSITE DW & JC: <1% CHRYSOTILE ASBESTOS DRYWALL: ND JOINT COMPOUND: 2% CHRYSOTILE ASBESTOS TAPE / PAINT: ND	15 % CELLULOSE 5 % FIBROUS GLASS NFM: 'GYPSUM' (CALCIUM SULFATE), CARBONATE.
Client #: BIO-A017 Micro #: 281877-17 Analyst: JM GR BROWN BASEBOARD MASTIC ROOM 18 EAST WALL	MASTIC (BROWN): ND	2 % MISC. FIBERS NFM: RESILIENT ORGANICALLY BOUND MATERIALS, MISC. PARTICLES
Client #: BIO-A018 Micro #: 281877-18 Analyst: JM BROWN BASEBOARD ROOM 35	MASTIC (BROWN): ND	2 % MISC. FIBERS NFM: RESILIENT ORGANICALLY BOUND MATERIALS, MISC. PARTICLES
Client #: BIO-A019 Micro #: 281877-19 Analyst: JM 1" X 1" GRAY CERAMIC TILE WITH BLACK SPECKS WITH OFF-WHITE GROUT WITH OFF-WHITE MORTAR ROOM 24 COUNTER TOP	CERAMIC TILE: ND GROUT: ND MORTAR: ND	NFM: ROCK FRAGMENTS, CARBONATE, BINDER
Client #: BIO-A020 Micro #: 281877-20 Analyst: JM 1" X 1" GRAY CERAMIC TILE WITH BLACK SPECKS WITH OFF-WHITE GROUT WITH OFF-WHITE MORTAR - ROOM 18	CERAMIC TILE: ND GROUT: ND MORTAR: ND	NFM: ROCK FRAGMENTS, CARBONATE, BINDER

Technical Supervisor: 

Baojia Ke, Ph.D.

6/4/2021

Date Reported

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BULK ASBESTOS ANALYSIS - POLARIZED LIGHT MICROSCOPY (PLM)



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SAN PABLO, CA

Micro Log In **281877**
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SAMPLE IDENTIFICATION

ASBESTOS QUANTITY (AREA %) / TYPES / LAYERS

DOMINANT
OTHER MATERIALS

If absent, ND is Reported (No Asbestos Detected)

Client #: BIO-A021 Micro #: 281877-21 Analyst: JM GR TSI ON 4" OD PIPE RUN ROOM 22 NORTH EAST CORNER	TSI: ND WRAP: ND	10 % CELLULOSE NFM: CARBONATE PERLITE
Client #: BIO-A022 Micro #: 281877-22 Analyst: JM TSI ON 4' OD PIPE RUN ROOM 22	TSI: ND WRAP: ND	10 % CELLULOSE NFM: CARBONATE PERLITE
Client #: BIO-A023 Micro #: 281877-23 Analyst: JM TSI ON 4' OD PIPE RUN ROOM 22	TSI: ND WRAP: ND	10 % CELLULOSE NFM: CARBONATE, MISC. PARTICLES
Client #: BIO-A024 Micro #: 281877-24 Analyst: JM 2" X 4" WHITE ACOUSTICAL CEILING TILE WITH PIN HOLE PATTERN - ROOM 24	CEILING TILE: ND PAINT: ND	45 % CELLULOSE 15 % FIBROUS GLASS NFM: PERLITE
Client #: BIO-A025 Micro #: 281877-25 Analyst: JM 2" X 4" WHITE ACOUSTICAL CEILING TILE WITH PIN HOLE PATTERN CENTER OF ROOM 39	CEILING TILE: ND PAINT: ND	45 % CELLULOSE 15 % FIBROUS GLASS NFM: PERLITE

Technical Supervisor: 

Baojia Ke, Ph.D.

6/4/2021

Date Reported

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BULK ASBESTOS ANALYSIS - POLARIZED LIGHT MICROSCOPY (PLM)



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PROJECT:
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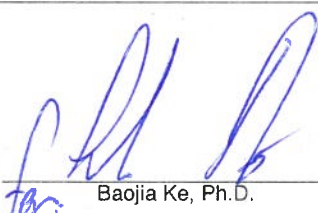
Micro Log In **281877**
Total Samples 144
Date Sampled 05/24/2021
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Date Analyzed 06/02/2021

SAMPLE IDENTIFICATION**ASBESTOS QUANTITY (AREA %) / TYPES / LAYERS****DOMINANT
OTHER MATERIALS**

If absent, ND Is Reported (No Asbestos Detected)

Client #: BIO-A026 Micro #: 281877-26 Analyst: JM 12" X 12" FT OFF-WHITE WITH GRAY STREAKS WITH YELLOW MASTIC - ROOM 128A ON FLOOR	FLOOR TILE: ND MASTIC: ND	NFM: SYNTHETIC MATERIAL, CARBONATE, ADHESIVE.
Client #: BIO-A027 Micro #: 281877-27 Analyst: JM 12" X 12" FT OFF-WHITE WITH GRAY STREAKS WITH YELLOW MASTIC ROOM 128A ON FLOOR	FLOOR TILE: ND MASTIC: ND	NFM: SYNTHETIC MATERIAL, CARBONATE, ADHESIVE.
Client #: BIO-A030 Micro #: 281877-28 Analyst: JM RED BRICK AND GRAY MORTAR ROOM 26 NORTH WALL	BRICK: ND MORTAR: ND	NFM: ROCK FRAGMENTS, CARBONATE, BINDER
Client #: BIO-A031 Micro #: 281877-29 Analyst: JM RED BRICK AND GRAY MORTAR EXT. SOUTH ENTRANCE	BRICK: ND MORTAR: ND	NFM: ROCK FRAGMENTS, CARBONATE, BINDER
Client #: BIO-A032 Micro #: 281877-30 Analyst: JM 12" X 12" FLOOR TILE WITH BLUE SPECKS OVER YELLOW MASTIC CORRIDOR SOUTH SIDE	FLOOR TILE: ND MASTIC (YELLOW): ND	NFM: SYNTHETIC MATERIAL, CARBONATE, ADHESIVE.

Technical Supervisor:


Baojia Ke, Ph.D.

6/4/2021

Date Reported

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If absent, ND is Reported (No Asbestos Detected)

Client #: BIO-A033 Micro #: 281877-31 Analyst: JM GR 12" X 12" FLOOR TILE WITH BLUE SPECKS OVER YELLOW MASTIC MEN'S RESTROOM VESTIBULE NORTHWEST CORNER	FLOOR TILE: ND MASTICS (YELLOW / TAN): 2% CHRYSOTILE ASBESTOS DEBRIS / DUST: ND	5% CELLULOSE 5% SYNTHETIC FIBERS NFM: SYNTHETIC MATERIAL, CARBONATE, ADHESIVE.
Client #: BIO-A034 Micro #: 281877-32 Analyst: JM GREEN CARPET MASTIC ROOM 43 SOUTHWEST CORNER	ND	5% SYNTHETIC FIBERS NFM: RESILIENT ORGANICALLY BOUND MATERIALS, MISC. PARTICLES
Client #: BIO-A035 Micro #: 281877-33 Analyst: JM GREEN CARPET ROOM 43 SOUTHEAST CORNER	ND	10% SYNTHETIC FIBERS NFM: RESILIENT ORGANICALLY BOUND MATERIALS, MISC. PARTICLES
Client #: BIO-A036 Micro #: 281877-34 Analyst: JM KNOCK DOWN WT ON WOOD PANEL WALLS CORRIDOR NORTH SIDE WEST END	TEXTURE: ND PAINT: ND	NFM: SYNTHETIC MATERIAL, CARBONATE.
Client #: BIO-A037 Micro #: 281877-35 Analyst: JM KNOCK DOWN WT ON WOOD PANEL WALLS CORRIDOR EAST NEXT TO ROOM 37	TEXTURE: ND PAINT: ND	NFM: SYNTHETIC MATERIAL, CARBONATE.

Technical Supervisor: 

Baojia Ke, Ph.D.

6/4/2021

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SAMPLE IDENTIFICATION	ASBESTOS QUANTITY (AREA %) / TYPES / LAYERS	DOMINANT OTHER MATERIALS
Client #: BIO-A038 Micro #: 281877-36 Analyst: JM KNOCK DOWN WT ON WOOD PANEL WALLS CORRIDOR WEST NEXT TO ROOM 18	ND If absent, ND Is Reported (No Asbestos Detected)	NFM: SYNTHETIC MATERIAL, CARBONATE.
Client #: BIO-A039 Micro #: 281877-37 Analyst: GR KNOCK DOWN WT ON WOOD PANEL WALLS CORRIDOR EAST NEXT TO ROOM 13	TEXTURE: ND PAINTS: ND	NFM: SYNTHETIC MATERIAL, CARBONATE.
Client #: BIO-A040 Micro #: 281877-38 Analyst: GR KNOCK DOWN WT ON WOOD PANEL WALLS SOUTH END NEXT TO ROOM 2	TEXTURE: ND PAINTS: ND	NFM: SYNTHETIC MATERIAL, CARBONATE.
Client #: BIO-A041 Micro #: 281877-39 Analyst: GR DARK TAN RSF WITH MOTTLE PATTERN ROOM B-8 NORTHWEST CORNER	SHEET FLOORING: ND BACKING / MASTICS (YELLOW / BEIGE): ND CONCRETE UNDERLAYMENT: ND	5% CELLULOSE 25% SYNTHETIC FIBERS NFM: SYNTHETIC MATERIAL, CARBONATE.
Client #: BIO-A042 Micro #: 281877-40 Analyst: GR DARK TAN RSF WITH MOTTLE PATTERN ROOM 39 NORTHWEST CORNER	SHEET FLOORING: ND BACKING / MASTICS (YELLOW / BEIGE): ND CONCRETE UNDERLAYMENT: ND	5% CELLULOSE 25% SYNTHETIC FIBERS NFM: SYNTHETIC MATERIAL, CARBONATE.

Technical Supervisor: 

Baojia Ke, Ph.D.

6/4/2021

Date Reported

NVLAP Lab Code 101872-0 (TESTING). Analyses use Polarized Light Microscopy (PLM), Micro Analytical SOP PLM-101. Basic techniques follow EPA – Appendix E to Subpart E of 40 CFR Part 763; Interim Method for the Determination of Asbestos in Bulk Insulation Samples" (originally published 1982), and EPA-600/R93-116 (1993). The 1993 method covers all types of bulk materials and is based on the 1982 Method, with improved analytical techniques for layered samples as required for NESHAP compliance. Asbestos is quantified by calibrated visual estimation. Detection limit is material dependent. Detection of asbestos traces (much less than 1%) may not be reliable or reproducible by PLM. Weight % cannot be determined by PLM. Asbestos with diameter below ~1 µm may not be detected by PLM. Absence of asbestos in dust, debris, and some compact materials, including floor tiles, cannot be conclusively established by PLM, and should be confirmed by Transmission Electron Microscopy (TEM). Interferences may prevent detection of small asbestos fibers, and hinder determination of some optical properties. Tremolite-asbestos or actinolite-asbestos may be indistinguishable by PLM from some similar, non-regulated amphiboles (e.g. the "Libby Amphiboles" richterite and winchite), and should be confirmed by TEM. The lower quantitation limit (reporting limit) of PLM estimation is 1%. The Cal-OSHA definition of asbestos-containing construction material is 0.1% asbestos; however, reliable determination of asbestos percent at this level cannot be done by PLM estimation; PLM Point Counting or TEM weight percent analysis are recommended. Only dominant non-asbestos materials (fibrous and non-fibrous) are listed. This analysis shall not be construed as conclusive for the presence of any reported materials other than asbestos, or for the absence of any non-asbestos material. Common interferences include, but are not limited to: cellulose, fibrous glass, other man-made vitreous fibers, synthetic fibers, elongate fragments of calcium sulfate, talc, wollastonite, animal hair, and other miscellaneous elongate particles. Sample heterogeneity is indicated by listing more than one distinct layer or material on the report. If more than one distinct sample is received in the same container, samples shall be marked with letters and analyzed separately. Layers within a sample are analyzed separately when feasible; if asbestos is detected, percentages are reported for individual layers. Interlayer contamination is possible among any layers in a sample. The notation ND (or "NONE DETECTED") indicates a result of "NO ASBESTOS DETECTED" in a homogeneous sample, or in a layer of a heterogeneous sample. Composite asbestos percentages from multiple layers are applicable only to wallboard / joint compound systems; compositing is based on customers' descriptions of material as "joint compound". Customers are solely responsible for identification and description of bulk materials listed on field forms. Laboratory descriptions may differ from those given by customers. Quality Control (QC): all results have been determined to be within acceptance limits prior to reporting. Reanalyzed samples are denoted by two sets of analyst initials. Unless otherwise stated herein, all samples were received in acceptable condition for analysis. This report must not be used to claim product endorsement by NIST or any U.S. Government agency. This report shall not be reproduced except in full, without the approval of Micro Analytical Laboratories, Inc., and pertains only to the samples analyzed as received. NFM = Non-fibrous materials.

MICRO ANALYTICAL LABORATORIES, INC.
BULK ASBESTOS ANALYSIS - POLARIZED LIGHT MICROSCOPY (PLM)



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 Gary Lowe
 Forensic Analytical Consulting
 21228 Cabot Boulevard
 Hayward, CA 94545

PROJECT:
PROJECT NO. PJ63338
BIOLOGICAL SCIENCE BUILDING
CONTRA COSTA COLLEGE
2600 MISSION BELL DRIVE
SAN PABLO, CA

Micro Log In **281877**
 Total Samples 144
 Date Sampled 05/24/2021
 Date Received 06/02/2021
 Date Analyzed 06/02/2021

SAMPLE IDENTIFICATION	ASBESTOS QUANTITY (AREA %) / TYPES / LAYERS	DOMINANT OTHER MATERIALS
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If absent, ND Is Reported (No Asbestos Detected)

Client #: BIO-A043 Micro #: 281877-41 Analyst: GR PIPE ELBOW ON 4" OD PIPE RUN ROOM 41	5% CHRYSOTILE ASBESTOS	5 % CELLULOSE 70 % FIBROUS GLASS NFM: CARBONATE SYNTHETIC MATERIAL GLASS FRAGMENTS
Client #: BIO-A044 Micro #: 281877-42 Analyst: PIPE ELBOW ON 4" OD PIPE RUN ROOM 17	NOT ANALYZED (PRIOR POSITIVE)	NFM:
Client #: BIO-A045 Micro #: 281877-43 Analyst: PIPE ELBOW ON 4" OD PIPE RUN ROOM 43	NOT ANALYZED (PRIOR POSITIVE)	NFM:
Client #: BIO-A046 Micro #: 281877-44 Analyst: GR PLASTER WEST WALL IN WASHROOM	PLASTER: ND SKIM COAT: ND PAINT: ND	3 % CELLULOSE NFM: "GYPSUM (CALCIUM SULFATE) CARBONATE SYNTHETIC MATERIAL
Client #: BIO-A047 Micro #: 281877-45 Analyst: GR PLASTER NORTH WALL IN STUDY ROOM	PLASTER: ND SKIM COAT: ND PAINT: ND	3 % CELLULOSE NFM: "GYPSUM (CALCIUM SULFATE) CARBONATE SYNTHETIC MATERIAL

Technical Supervisor: 

Baojia Ke, Ph.D.

6/4/2021

Date Reported

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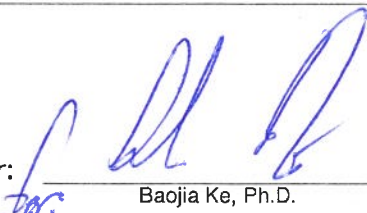
PROJECT:
PROJECT NO. PJ63338
BIOLOGICAL SCIENCE BUILDING
CONTRA COSTA COLLEGE
2600 MISSION BELL DRIVE
SAN PABLO, CA

Micro Log In **281877**
 Total Samples 144
 Date Sampled 05/24/2021
 Date Received 06/02/2021
 Date Analyzed 06/02/2021

SAMPLE IDENTIFICATION	ASBESTOS QUANTITY (AREA %) / TYPES / LAYERS	DOMINANT OTHER MATERIALS
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If absent, ND Is Reported (No Asbestos Detected)

Client #: BIO-A048 Micro #: 281877-46 Analyst: GR PLASTER WOMEN'S RESTROOM	PLASTER: ND SKIM COAT: ND PAINT: ND	3 % CELLULOSE NFM: *GYPSUM (CALCIUM SULFATE) CARBONATE SYNTHETIC MATERIAL
Client #: BIO-A049 Micro #: 281877-47 Analyst: GR PLASTER WOMEN'S RESTROOM	PLASTER: ND SKIM COAT: ND PAINT: ND	3 % CELLULOSE NFM: *GYPSUM (CALCIUM SULFATE) CARBONATE SYNTHETIC MATERIAL
Client #: BIO-A050 Micro #: 281877-48 Analyst: GR GR PLASTER MEN'S RESTROOM	PLASTER: ND SKIM COAT: ND PAINT: ND	3 % CELLULOSE NFM: *GYPSUM (CALCIUM SULFATE) CARBONATE SYNTHETIC MATERIAL
Client #: BIO-A051 Micro #: 281877-49 Analyst: GR 4" X 4" OFF-WHITE CERAMIC WALL TILE WITH OFF-WHITE GROUT WITH OFF-WHITE GROUT EAST WALL OF ROOM 43	CERAMIC WALL TILE: ND MORTAR / GROUT: ND	NFM: CARBONATE ROCK FRAGMENTS CERAMIC
Client #: BIO-A052 Micro #: 281877-50 Analyst: GR 4" X 4" OFF-WHITE CERAMIC WALL TILE WITH OFF-WHITE GROUT WITH OFF-WHITE GROUT EAST WALL OF ROOM 43	CERAMIC WALL TILE: ND MORTAR / GROUT: ND	NFM: CARBONATE ROCK FRAGMENTS CERAMIC

Technical Supervisor: 

Baojia Ke, Ph.D.

6/4/2021

Date Reported

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PROJECT:
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BIOLOGICAL SCIENCE BUILDING
CONTRA COSTA COLLEGE
2600 MISSION BELL DRIVE
SAN PABLO, CA

Micro Log In **281877**
 Total Samples 144
 Date Sampled 05/24/2021
 Date Received 06/02/2021
 Date Analyzed 06/03/2021

SAMPLE IDENTIFICATION	ASBESTOS QUANTITY (AREA %) / TYPES / LAYERS	DOMINANT OTHER MATERIALS
	If absent, ND Is Reported (No Asbestos Detected)	

Client #: BIO-A053 Micro #: 281877-51 Analyst: JM YELLOW WALL PANEL ADHESIVE EAST WALL OF ROOM 43	ND	NFM: RESILIENT ORGANICALLY BOUND MATERIALS, MISC. PARTICLES
Client #: BIO-A054 Micro #: 281877-52 Analyst: JM YELLOW WALL PANEL ADHESIVE WEST WALL OF ROOM 43	ND	NFM: RESILIENT ORGANICALLY BOUND MATERIALS, MISC. PARTICLES
Client #: BIO-A055 Micro #: 281877-53 Analyst: JM YELLOW / BEIGE BASEBOARD MASTIC ROOM 26	ND	NFM: RESILIENT ORGANICALLY BOUND MATERIALS, MISC. PARTICLES
Client #: BIO-A056 Micro #: 281877-54 Analyst: JM YELLOW / BEIGE BASEBOARD MASTIC ROOM 2	ND	5 % CELLULOSE NFM: RESILIENT ORGANICALLY BOUND MATERIALS, MISC. PARTICLES
Client #: BIO-A057 Micro #: 281877-55 Analyst: JM FIBERGLASS PIPE LAGGING (JACKET) OVER ON 6" OD PIPE RUN - ROOM 26	FIBERGLASS: ND JACKET: ND	10 % CELLULOSE 80 % FIBROUS GLASS NFM: GLASS FRAGMENTS, BINDER.

Technical Supervisor:

Baojia Ke, Ph.D.

6/4/2021

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BULK ASBESTOS ANALYSIS - POLARIZED LIGHT MICROSCOPY (PLM)



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Hayward, CA 94545

PROJECT:
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BIOLOGICAL SCIENCE BUILDING
CONTRA COSTA COLLEGE
2600 MISSION BELL DRIVE
SAN PABLO, CA

Micro Log In **281877**
Total Samples 144
Date Sampled 05/24/2021
Date Received 06/02/2021
Date Analyzed 06/03/2021

SAMPLE IDENTIFICATION	ASBESTOS QUANTITY (AREA %) / TYPES / LAYERS	DOMINANT OTHER MATERIALS
If absent, ND Is Reported (No Asbestos Detected)		
Client #: BIO-A058 Micro #: 281877-56 Analyst: JM FIBERGLASS PIPE LAGGING (JACKET) OVER ON 6" OD PIPE RUN - ROOM 3	FIBERGLASS: ND JACKET: ND	10 % CELLULOSE 80 % FIBROUS GLASS NFM: GLASS FRAGMENTS, BINDER.
Client #: BIO-A059 Micro #: 281877-57 Analyst: JM PIPE LAGGING (JACKET) OVER FIBERGLASS ON 6" OD PIPE RUN ROOM 1	FIBERGLASS: ND JACKET: ND	10 % CELLULOSE 80 % FIBROUS GLASS NFM: GLASS FRAGMENTS, BINDER.
Client #: BIO-A060 Micro #: 281877-58 Analyst: JM PIPE ELBOW ON 6" OD PIPE RUN ROOM 1	20% AMOSITE ASBESTOS 5% CHRYSOTILE ASBESTOS	NFM: CARBONATE, MISC. PARTICLES
Client #: BIO-A061 Micro #: 281877-59 Analyst: PIPE ELBOW ON 6" OD PIPE RUN ROOM 2 EAST WALL SOUTH END ABOVE DOOR	NOT ANALYZED (PRIOR POSITIVE)	NFM:
Client #: BIO-A062 Micro #: 281877-60 Analyst: PIPE ELBOW ON 6" OD PIPE RUN ROOM 43	NOT ANALYZED (PRIOR POSITIVE)	NFM:

Technical Supervisor: 

Baojia Ke, Ph.D.

6/4/2021

Date Reported

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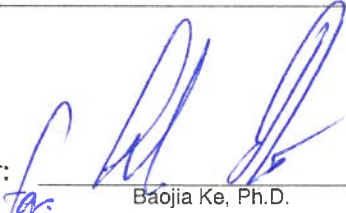
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OTHER MATERIALS**

If absent, ND Is Reported (No Asbestos Detected)

Client #: BIO-A063	Micro #: 281877-61 Analyst: JM BLACK CHALK BOARD ROOM 39	20% CHRYSOTILE ASBESTOS	NFM: CARBONATE, MISC. PARTICLES
Client #: BIO-A064	Micro #: 281877-62 Analyst: BLACK CHALK BOARD ROOM 2	NOT ANALYZED (PRIOR POSITIVE)	NFM:
Client #: BIO-A065	Micro #: 281877-63 Analyst: JM AF WHITE INSULATION ON SINK PIPE DRAINS - ROOM 24	ND	NFM: CARBONATE, MISC. PARTICLES
Client #: BIO-A066	Micro #: 281877-64 Analyst: JM WHITE INSULATION ON SINK PIPE DRAINS - ROOM 39	ND	NFM: CARBONATE, MISC. PARTICLES
Client #: BIO-A069	Micro #: 281877-65 Analyst: JM RED FIRE STOP ROOM 41	ND	15 % FIBROUS GLASS NFM: RESILIENT ORGANICALLY BOUND MATERIALS, MISC. PARTICLES

Technical Supervisor: 

Baojia Ke, Ph.D.

6/4/2021

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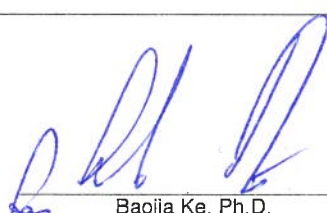
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SAMPLE IDENTIFICATION **ASBESTOS QUANTITY (AREA %) / TYPES / LAYERS** **DOMINANT OTHER MATERIALS**

If absent, ND is Reported (No Asbestos Detected)

Client #: BIO-A070		
Micro #: 281877-66 RED FIRE STOP ROOM 5	Analyst: JM ND	15 % FIBROUS GLASS NFM: RESILIENT ORGANICALLY BOUND MATERIALS, MISC. PARTICLES
Client #: BIO-A071		
Micro #: 281877-67 BLACK COUNTER TOPS ROOM 39	Analyst: JM 35% CHRYSOTILE ASBESTOS	NFM: ROCK FRAGMENTS, CARBONATE, BINDER
Client #: BIO-A072		
Micro #: 281877-68 BLACK COUNTER TOPS ROOM 22	Analyst: NOT ANALYZED (PRIOR POSITIVE)	NFM:
Client #: BIO-A073		
Micro #: 281877-69 GRAY COUNTER TOPS SOUTH WALL OF ROOM 41	Analyst: JM AF ND	NFM: ROCK FRAGMENTS, CARBONATE, BINDER
Client #: BIO-A074		
Micro #: 281877-70 GRAY COUNTER TOPS ROOM 17	Analyst: JM AF ND	NFM: ROCK FRAGMENTS, CARBONATE, BINDER

Technical Supervisor:


 Baojia Ke, Ph.D.

6/4/2021

Date Reported

NVLAP Lab Code 101872-0 (TESTING). Analyses use Polarized Light Microscopy (PLM), Micro Analytical SOP PLM-101. Basic techniques follow EPA - Appendix E to Subpart E of 40 CFR Part 783; Interim Method for the Determination of Asbestos in Bulk Insulation Samples" (originally published 1982), and EPA-600/R93-116 (1993). The 1993 method covers all types of bulk materials and is based on the 1982 Method, with improved analytical techniques for layered samples as required for NESHAP compliance. Asbestos is quantified by calibrated visual estimation. Detection limit is material dependent. Detection of asbestos traces (much less than 1%) may not be reliable or reproducible by PLM. Weight % cannot be determined by PLM. Asbestos with diameter below ~1 µm may not be detected by PLM. Absence of asbestos in dust, debris, and some compact materials, including floor tiles, cannot be conclusively established by PLM, and should be confirmed by Transmission Electron Microscopy (TEM). Interferences may prevent detection of small asbestos fibers, and hinder determination of some optical properties. Tremolite-asbestos or actinolite-asbestos may be indistinguishable by PLM from some similar, non-regulated amphiboles (e.g. the "Libby Amphiboles" richterite and winchite), and should be confirmed by TEM. The lower quantitation limit (reporting limit) of PLM estimation is 1%. The Cal-OSHA definition of asbestos-containing construction material is 0.1% asbestos; however, reliable determination of asbestos percent at this level cannot be done by PLM estimation; PLM Point Counting or TEM weight percent analysis are recommended. Only dominant non-asbestos materials (fibrous and non-fibrous) are listed. This analysis shall not be construed as conclusive for the presence of any reported materials other than asbestos, or for the absence of any non-asbestos material. Common interferences include, but are not limited to: cellulose, fibrous glass, other man-made vitreous fibers, synthetic fibers, elongate fragments of calcium sulfate, talc, wollastonite, animal hair, and other miscellaneous elongate particles. Sample heterogeneity is indicated by listing more than one distinct layer or material on the report. If more than one distinct sample is received in the same container, samples shall be marked with letters and analyzed separately. Layers within a sample are analyzed separately when feasible; if asbestos is detected, percentages are reported for individual layers. Interlayer contamination is possible among any layers in a sample. The notation ND (or "NONE DETECTED") indicates a result of "NO ASBESTOS DETECTED" in a homogeneous sample, or in a layer of a heterogeneous sample. Composite asbestos percentages from multiple layers are applicable only to wallboard / joint compound systems; compositing is based on customers' descriptions of material as "joint compound". Customers are solely responsible for identification and description of bulk materials listed on field forms. Laboratory descriptions may differ from those given by customers. Quality Control (QC): all results have been determined to be within acceptance limits prior to reporting. Reanalyzed samples are denoted by two sets of analyst initials. Unless otherwise stated herein, all samples were received in acceptable condition for analysis. This report must not be used to claim product endorsement by NIST or any U.S. Government agency. This report shall not be reproduced except in full, without the approval of Micro Analytical Laboratories, Inc., and pertains only to the samples analyzed as received. NFM = Non-fibrous materials.

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BULK ASBESTOS ANALYSIS - POLARIZED LIGHT MICROSCOPY (PLM)



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 Forensic Analytical Consulting
 21228 Cabot Boulevard
 Hayward, CA 94545

PROJECT:
PROJECT NO. PJ63338
BIOLOGICAL SCIENCE BUILDING
CONTRA COSTA COLLEGE
2600 MISSION BELL DRIVE
SAN PABLO, CA

Micro Log In **281877**
 Total Samples 144
 Date Sampled 05/24/2021
 Date Received 06/02/2021
 Date Analyzed 06/02/2021

SAMPLE IDENTIFICATION	ASBESTOS QUANTITY (AREA %) / TYPES / LAYERS If absent, ND Is Reported (No Asbestos Detected)	DOMINANT OTHER MATERIALS
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Client #: BIO-A075 Micro #: 281877-71 Analyst: BK ORANGE PEEL WT ON DRYWALL EAST WALL NORTH END ROOM 2	TEXTURE: 2% CHRYSOTILE ASBESTOS PAINT: ND	NFM: CARBONATE, MISC. PARTICLES
Client #: BIO-A076 Micro #: 281877-72 Analyst: ORANGE PEEL WT ON DRYWALL ROOM B8 EAST WALL SOUTH END	NOT ANALYZED (PRIOR POSITIVE)	NFM:
Client #: BIO-A077 Micro #: 281877-73 Analyst: ORANGE PEEL WT ON DRYWALL ROOM B8 EAST WALL NORTH END	NOT ANALYZED (PRIOR POSITIVE)	NFM:
Client #: BIO-A078 Micro #: 281877-74 Analyst: ORANGE PEEL WT ON DRYWALL ROOM 6 SOUTH WALL	NOT ANALYZED (PRIOR POSITIVE)	NFM:
Client #: BIO-A079 Micro #: 281877-75 Analyst: ORANGE PEEL WT ON DRYWALL ROOM 12	NOT ANALYZED (PRIOR POSITIVE)	NFM:

Technical Supervisor: 

Baojia Ke, Ph.D.

6/4/2021

Date Reported

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BULK ASBESTOS ANALYSIS - POLARIZED LIGHT MICROSCOPY (PLM)



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PROJECT:
PROJECT NO. PJ63338
BIOLOGICAL SCIENCE BUILDING
CONTRA COSTA COLLEGE
2600 MISSION BELL DRIVE.
SAN PABLO, CA

Micro Log In **281877**
 Total Samples 144
 Date Sampled 05/24/2021
 Date Received 06/02/2021
 Date Analyzed 06/02/2021

SAMPLE IDENTIFICATION	ASBESTOS QUANTITY (AREA %) / TYPES / LAYERS	DOMINANT OTHER MATERIALS
If absent, ND Is Reported (No Asbestos Detected)		
Client #: BIO-A080 Micro #: 281877-76 Analyst: BK JOINT COMPOUND / WB ON DRYWALL WITH ORANGE PEEL WT ROOM B8 SOUTH EAST CORNER	COMPOSITE DW & JC: <1% CHRYSOTILE ASBESTOS DRYWALL: ND JOINT COMPOUND: 3% CHRYSOTILE ASBESTOS TAPE: ND PAINT: ND	10 % CELLULOSE NFM: GYPSUM (CALCIUM SULFATE), CARBONATE.
Client #: BIO-A081 Micro #: 281877-77 Analyst: BK JOINT COMPOUND / WB ON DRYWALL WITH ORANGE PEEL WT ROOM 6 SOUTH WALL EAST END	COMPOSITE DW & JC: <1% CHRYSOTILE ASBESTOS DRYWALL: ND JOINT COMPOUND: 3% CHRYSOTILE ASBESTOS TAPE: ND PAINT: ND	10 % CELLULOSE NFM: GYPSUM (CALCIUM SULFATE), CARBONATE.
Client #: BIO-A082 Micro #: 281877-78 Analyst: BK JOINT COMPOUND / WB ON DRYWALL WITH ORANGE PEEL WT - ROOM 12	COMPOSITE DW & JC: <1% CHRYSOTILE ASBESTOS DRYWALL: ND JOINT COMPOUND: 3% CHRYSOTILE ASBESTOS TAPE: ND PAINT: ND	10 % CELLULOSE NFM: GYPSUM (CALCIUM SULFATE), CARBONATE.
Client #: BIO-A083 Micro #: 281877-79 Analyst: BK AF CONCRETE ON EQUIPMENT PADS ROOM 3 BOILER ROOM UPPER WEST SIDE	CONCRETE: ND PAINT: ND	NFM: ROCK FRAGMENTS, CARBONATE; BINDER
Client #: BIO-A084 Micro #: 281877-80 Analyst: BK CONCRETE ON EQUIPMENT PADS ROOM 3 BOILER ROOM SOUTH WALL	CONCRETE: ND PAINT: ND	NFM: ROCK FRAGMENTS, CARBONATE, BINDER

Technical Supervisor: 

Baojia Ke, Ph.D.

6/4/2021

Date Reported

NVLAP Lab Code 101872-0 (TESTING). Analyses use Polarized Light Microscopy (PLM), Micro Analytical SOP PLM-101. Basic techniques follow EPA - Appendix E to Subpart E of 40 CFR Part 763; Interim Method for the Determination of Asbestos in Bulk Insulation Samples" (originally published 1982), and EPA-800/R93-116 (1993). The 1993 method covers all types of bulk materials and is based on the 1982 Method, with improved analytical techniques for layered samples as required for NESHAP compliance. Asbestos is quantified by calibrated visual estimation. Detection limit is material dependent. Detection of asbestos traces (much less than 1%) may not be reliable or reproducible by PLM. Weight % cannot be determined by PLM. Asbestos with diameter below ~1 µm may not be detected by PLM. Absence of asbestos in dust, debris, and some compact materials, including floor tiles, cannot be conclusively established by PLM, and should be confirmed by Transmission Electron Microscopy (TEM). Interferences may prevent detection of small asbestos fibers, and hinder determination of some optical properties. Tremolite-asbestos or actinolite-asbestos may be indistinguishable by PLM from some similar, non-regulated amphiboles (e.g. the "Libby Amphiboles" richterite and winchite), and should be confirmed by TEM. The lower quantitation limit (reporting limit) of PLM estimation is 1%. The Cal-OSHA definition of asbestos-containing construction material is 0.1% asbestos; however, reliable determination of asbestos percent at this level cannot be done by PLM estimation; PLM Point Counting or TEM weight percent analysis are recommended. Only dominant non-asbestos materials (fibrous and non-fibrous) are listed. This analysis shall not be construed as conclusive for the presence of any reported materials other than asbestos, or for the absence of any non-asbestos material. Common interferences include, but are not limited to: cellulose, fibrous glass, other man-made vitreous fibers, synthetic fibers, elongate fragments of calcium sulfate, talc, wollastonite, animal hair, and other miscellaneous elongate particles. Sample heterogeneity is indicated by listing more than one distinct layer or material on the report. If more than one distinct sample is received in the same container, samples shall be marked with letters and analyzed separately. Layers within a sample are analyzed separately when feasible; if asbestos is detected, percentages are reported for individual layers. Interlayer contamination is possible among any layers in a sample. The notation ND (or "NONE DETECTED") indicates a result of "NO ASBESTOS DETECTED" in a homogeneous sample, or in a layer of a heterogeneous sample. Composite asbestos percentages from multiple layers are applicable only to wallboard / joint compound systems; compositing is based on customers' descriptions of material as "joint compound". Customers are solely responsible for identification and description of bulk materials listed on field forms. Laboratory descriptions may differ from those given by customers. Quality Control (QC): all results have been determined to be within acceptance limits prior to reporting. Reanalyzed samples are denoted by two sets of analyst initials. Unless otherwise stated herein, all samples were received in acceptable condition for analysis. This report must not be used to claim product endorsement by NIST or any U.S. Government agency. This report shall not be reproduced except in full, without the approval of Micro Analytical Laboratories, Inc., and pertains only to the samples analyzed as received. NFM = Non-fibrous materials.

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BULK ASBESTOS ANALYSIS - POLARIZED LIGHT MICROSCOPY (PLM)

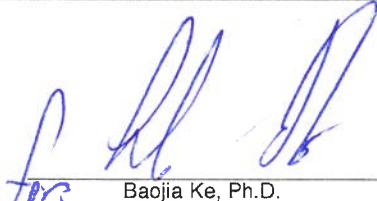


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PROJECT:
PROJECT NO. PJ63338
BIOLOGICAL SCIENCE BUILDING
CONTRA COSTA COLLEGE
2600 MISSION BELL DRIVE
SAN PABLO, CA

Micro Log In **281877**
 Total Samples 144
 Date Sampled 05/24/2021
 Date Received 06/02/2021
 Date Analyzed 06/02/2021

SAMPLE IDENTIFICATION	ASBESTOS QUANTITY (AREA %) / TYPES / LAYERS If absent, ND is Reported (No Asbestos Detected)	DOMINANT OTHER MATERIALS
Client #: BIO-A085 Micro #: 281877-81 Analyst: BK PIPE GASKETS ROOM 3 BOILER ROOM SOUTH EAST CORNER	ND	70 % CELLULOSE NFM:
Client #: BIO-A086 Micro #: 281877-82 Analyst: BK PIPE GASKETS ROOM 3 BOILER ROOM CENTRAL SOUTH WALL	ND	70 % CELLULOSE NFM:
Client #: BIO-A087 Micro #: 281877-83 Analyst: BK 12" X 12" OFF-WHITE WALL TILES OVER BROWN MASTIC ROOM 1 NORTH WALL	TILE: ND COATING (WHITE): ND MASTIC: ND	90 % CELLULOSE NFM: SYNTHETIC MATERIAL
Client #: BIO-A088 Micro #: 281877-84 Analyst: BK 12" X 12" OFF-WHITE WALL TILES OVER BROWN MASTIC ROOM 1 NORTH WALL	TILE: ND COATING (WHITE): ND MASTIC: ND	90 % CELLULOSE NFM: SYNTHETIC MATERIAL
Client #: BIO-A089 Micro #: 281877-85 Analyst: BK TANK INSULATION ROOM 3 BOILER ROOM	20% AMOSITE ASBESTOS 5% CHRYSOTILE ASBESTOS	NFM: CARBONATE, MISC. PARTICLES

Technical Supervisor: 

Baojia Ke, Ph.D.

6/4/2021

Date Reported

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BULK ASBESTOS ANALYSIS - POLARIZED LIGHT MICROSCOPY (PLM)



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 Hayward, CA 94545

PROJECT:
PROJECT NO. PJ63338
BIOLOGICAL SCIENCE BUILDING
CONTRA COSTA COLLEGE
2600 MISSION BELL DRIVE
SAN PABLO, CA

Micro Log In **281877**
 Total Samples 144
 Date Sampled 05/24/2021
 Date Received 06/02/2021
 Date Analyzed

SAMPLE IDENTIFICATION ASBESTOS QUANTITY (AREA %) / TYPES / LAYERS DOMINANT OTHER MATERIALS

If absent, ND Is Reported (No Asbestos Detected)

Client #: BIO-A090 Micro #: 281877-86 Analyst: TANK INSULATION ROOM 3 BOILER ROOM	NOT ANALYZED (PRIOR POSITIVE)	NFM:
Client #: BIO-A091 Micro #: 281877-87 Analyst: TANK INSULATION ROOM 3 BOILER ROOM	NOT ANALYZED (PRIOR POSITIVE)	NFM:
Client #: BIO-A092 Micro #: 281877-88 Analyst: BK WHITE HVAC VIBRATION DAMPENERS - ROOM 26	40% CHRYSOTILE ASBESTOS	60 % SYNTHETIC FIBERS NFM: CARBONATE, MISC. PARTICLES
Client #: BIO-A093 Micro #: 281877-89 Analyst: WHITE HVAC VIBRATION DAMPENERS- ROOM 37	NOT ANALYZED (PRIOR POSITIVE)	NFM:
Client #: BIO-A094 Micro #: 281877-90 Analyst: BK GREEN HVAC VIBRATION DAMPENER ROOM 26	ND	95 % CELLULOSE NFM: MISCELLANEOUS PARTICLES

Technical Supervisor: 

Baojia Ke, Ph.D.

6/4/2021

Date Reported

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SAN PABLO, CA

Micro Log In **281877**
 Total Samples 144
 Date Sampled 05/24/2021
 Date Received 06/02/2021
 Date Analyzed 06/02/2021

SAMPLE IDENTIFICATION	ASBESTOS QUANTITY (AREA %) / TYPES / LAYERS If absent, ND is Reported (No Asbestos Detected)	DOMINANT OTHER MATERIALS
Client #: BIO-A095 Micro #: 281877-91 Analyst: BK GREEN HVAC VIBRATION DAMPENER ROOM 37	ND	95 % CELLULOSE NFM: MISCELLANEOUS PARTICLES
Client #: BIO-A096 Micro #: 281877-92 Analyst: BK BLACK MASTIC ON HVAC COILS DRIP PAN ROOM 26	15% CHRYSOTILE ASBESTOS	NFM: TAR
Client #: BIO-A097 Micro #: 281877-93 Analyst: BLACK MASTIC ON HVAC COILS DRIP PAN ROOM 37	NOT ANALYZED (PRIOR POSITIVE)	NFM:
Client #: BIO-A098 Micro #: 281877-94 Analyst: BK WHITE CLOTH HVAC GASKET ON HVAC CONNECTION ROOM 13	80% CHRYSOTILE ASBESTOS	5 % CELLULOSE NFM: BINDER, OTHER, MISCELLANEOUS.
Client #: BIO-A099 Micro #: 281877-95 Analyst: WHITE CLOTH HVAC GASKET ON HVAC CONNECTION ROOM 13	NOT ANALYZED (PRIOR POSITIVE)	NFM:

Technical Supervisor: 

Baojia Ke, Ph.D.

6/4/2021

Date Reported

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Micro Log In **281877**
 Total Samples 144
 Date Sampled 05/24/2021
 Date Received 06/02/2021
 Date Analyzed 06/02/2021

SAMPLE IDENTIFICATION	ASBESTOS QUANTITY (AREA %) / TYPES / LAYERS	DOMINANT OTHER MATERIALS
	If absent, ND Is Reported (No Asbestos Detected)	

Client #: BIO-A100 Micro #: 281877-96 Analyst: BK ROOF CURB FLASHING ROOF SOUTH SIDE	TAR WITH GRAVEL: ND FELT: ND BROWN FIBROUS INSULATION: ND	40 % CELLULOSE 5 % FIBROUS GLASS NFM: TAR/ASPHALT, BINDER
Client #: BIO-A101 Micro #: 281877-97 Analyst: BK ROOF CURB FLASHING ROOF WEST SIDE NORTH END	TAR WITH GRAVEL: ND FELT: ND BROWN FIBROUS INSULATION: ND	40 % CELLULOSE 5 % FIBROUS GLASS NFM: TAR/ASPHALT, BINDER
Client #: BIO-A102 Micro #: 281877-98 Analyst: BK AF GRAY / BLACK ROOF PENETRATION MASTIC ROOF EXHAUST PENETRATION FLUE	ND	10 % CELLULOSE NFM: TAR/ASPHALT, BINDER
Client #: BIO-A103 Micro #: 281877-99 Analyst: BK GRAY / BLACK ROOF PENETRATION MASTIC ROOF EXHAUST PENETRATION FLUE	ND	10 % CELLULOSE NFM: TAR/ASPHALT, BINDER
Client #: BIO-A104 Micro #: 281877-100 Analyst: BK OFF-WHITE INSULATION ON PIPE BRACKET SUPPORT ROOF SOUTHWEST CORNER CHILLED WATER RETURN LINE	ND	30 % CELLULOSE NFM: CARBONATE, MISC. PARTICLES

Technical Supervisor:

Baojia Ke, Ph.D.

6/4/2021

Date Reported

NVLAP Lab Code 101872-0 (TESTING). Analyses use Polarized Light Microscopy (PLM), Micro Analytical SOP PLM-101. Basic techniques follow EPA - Appendix E to Subpart E of 40 CFR Part 763; Interim Method for the Determination of Asbestos in Bulk Insulation Samples" (originally published 1982), and EPA-600/R93-116 (1993). The 1993 method covers all types of bulk materials and is based on the 1982 Method, with improved analytical techniques for layered samples as required for NESHAP compliance. Asbestos is quantified by calibrated visual estimation. Detection limit is material dependent. Detection of asbestos traces (much less than 1%) may not be reliable or reproducible by PLM. Weight % cannot be determined by PLM. Asbestos with diameter below ~1 µm may not be detected by PLM. Absence of asbestos in dust, debris, and some compact materials, including floor tiles, cannot be conclusively established by PLM, and should be confirmed by Transmission Electron Microscopy (TEM). Interferences may prevent detection of small asbestos fibers, and hinder determination of some optical properties. Tremolite-asbestos or actinolite-asbestos may be indistinguishable by PLM from some similar, non-regulated amphiboles (e.g. the "Libby Amphiboles" richterite and winchite), and should be confirmed by TEM. The lower quantitation limit (reporting limit) of PLM estimation is 1%. The Cal-OSHA definition of asbestos-containing construction material is 0.1% asbestos; however, reliable determination of asbestos percent at this level cannot be done by PLM estimation; PLM Point Counting or TEM weight percent analysis are recommended. Only dominant non-asbestos materials (fibrous and non-fibrous) are listed. This analysis shall not be construed as conclusive for the presence of any reported materials other than asbestos, or for the absence of any non-asbestos material. Common interferences include, but are not limited to: cellulose, fibrous glass, other man-made vitreous fibers, synthetic fibers, elongate fragments of calcium sulfate, talc, wollastonite, animal hair, and other miscellaneous elongate particles. Sample heterogeneity is indicated by listing more than one distinct layer or material on the report. If more than one distinct sample is received in the same container, samples shall be marked with letters and analyzed separately. Layers within a sample are analyzed separately when feasible; if asbestos is detected, percentages are reported for individual layers. Interlayer contamination is possible among any layers in a sample. The notation ND (or "NONE DETECTED") indicates a result of "NO ASBESTOS DETECTED" in a homogeneous sample, or in a layer of a heterogeneous sample. Composite asbestos percentages from multiple layers are applicable only to wallboard / joint compound systems; compositing is based on customers' descriptions of material as "joint compound". Customers are solely responsible for identification and description of bulk materials listed on field forms. Laboratory descriptions may differ from those given by customers. Quality Control (QC): all results have been determined to be within acceptance limits prior to reporting. Reanalyzed samples are denoted by two sets of analyst initials. Unless otherwise stated herein, all samples were received in acceptable condition for analysis. This report must not be used to claim product endorsement by NIST or any U.S. Government agency. This report shall not be reproduced except in full, without the approval of Micro Analytical Laboratories, Inc., and pertains only to the samples analyzed as received. NFM = Non-fibrous materials.

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BULK ASBESTOS ANALYSIS - POLARIZED LIGHT MICROSCOPY (PLM)



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 Hayward, CA 94545

PROJECT:
PROJECT NO. PJ63338
BIOLOGICAL SCIENCE BUILDING
CONTRA COSTA COLLEGE
2600 MISSION BELL DRIVE
SAN PABLO, CA

Micro Log In **281877**
 Total Samples 144
 Date Sampled 05/24/2021
 Date Received 06/02/2021
 Date Analyzed 06/03/2021

SAMPLE IDENTIFICATION	ASBESTOS QUANTITY (AREA %) / TYPES / LAYERS If absent, ND Is Reported (No Asbestos Detected)	DOMINANT OTHER MATERIALS
Client #: BIO-A105 Micro #: 281877-101 Analyst: JM OFF-WHITE INSULATION ON PIPE BRACKET SUPPORT ROOF WEST SIDE OF HVAC UNIT	ND	15 % CELLULOSE 5 % FIBROUS GLASS NFM: CARBONATE, MISC. PARTICLES
Client #: BIO-A106 Micro #: 281877-102 Analyst: JM GRAY HVAC SEAM MASTIC ROOF CENTRAL FROM OLD HVAC	MASTIC: ND PAINT (SILVER): 8% CHRYSOTILE ASBESTOS MESH: ND	15 % CELLULOSE 5 % FIBROUS GLASS NFM: CARBONATE, MISC. PARTICLES
Client #: BIO-A107 Micro #: 281877-103 Analyst: GRAY HVAC SEAM MASTIC ROOF SOUTHEAST CORNER FROM OLD HVAC	NOT ANALYZED (PRIOR POSITIVE)	NFM:
Client #: BIO-A108 Micro #: 281877-104 Analyst: JM GRAY ROLLED ROOF PATCH ROOF SOUTHEAST CORNER	SHINGLE: ND TAR: ND CELLULOSE FELT: ND	25 % CELLULOSE 5 % FIBROUS GLASS NFM: TAR/ASPHALT, BINDER
Client #: BIO-A109 Micro #: 281877-105 Analyst: JM GRAY ROLLED ROOF PATCH ROOF NORTH SIDE	SHINGLE: ND TAR: ND CELLULOSE FELT: ND	25 % CELLULOSE 5 % FIBROUS GLASS NFM: TAR/ASPHALT, BINDER

Technical Supervisor: 

Baojia Ke, Ph.D.

6/4/2021

Date Reported

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BULK ASBESTOS ANALYSIS - POLARIZED LIGHT MICROSCOPY (PLM)



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PROJECT:
PROJECT NO. PJ63338
BIOLOGICAL SCIENCE BUILDING
CONTRA COSTA COLLEGE
2600 MISSION BELL DRIVE
SAN PABLO, CA

Micro Log In **281877**
 Total Samples 144
 Date Sampled 05/24/2021
 Date Received 06/02/2021
 Date Analyzed 06/03/2021

SAMPLE IDENTIFICATION	ASBESTOS QUANTITY (AREA %) / TYPES / LAYERS If absent, ND Is Reported (No Asbestos Detected)	DOMINANT OTHER MATERIALS
Client #: BIO-A110 Micro #: 281877-106 Analyst: JM GRAY ROOF MASTIC ON GRAY ROLLED ROOF PATCHES ROOF SOUTHEAST CORNER	ND	20 % CELLULOSE 5 % FIBROUS GLASS NFM: TAR/ASPHALT, BINDER
Client #: BIO-A111 Micro #: 281877-107 Analyst: JM GRAY ROOF MASTIC ON GRAY ROLLED ROOF PATCHES ROOF SOUTHEAST CORNER	ND	20 % CELLULOSE 5 % FIBROUS GLASS NFM: TAR/ASPHALT, BINDER
Client #: BIO-A112 Micro #: 281877-108 Analyst: JM DARK GRAY SEALANT ON GENERATOR EXHAUST DUCT FAN ROOF SOUTHEAST CORNER	2% CHRYSOTILE ASBESTOS	NFM: RESILIENT ORGANICALLY BOUND MATERIALS, MISC. PARTICLES
Client #: BIO-A113 Micro #: 281877-109 Analyst: DARK GRAY SEALANT ON GENERATOR EXHAUST DUCT FAN ROOF SOUTHEAST CORNER	NOT ANALYZED (PRIOR POSITIVE)	NFM:
Client #: BIO-A114 Micro #: 281877-110 Analyst: JM LIGHT GRAY HVAC SEAM MASTIC ROOF FROM NEWER HVAC UNIT DUCT	ND	NFM: RESILIENT ORGANICALLY BOUND MATERIALS, MISC. PARTICLES

Technical Supervisor: 

Baojia Ke, Ph.D.

6/4/2021

Date Reported

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PROJECT:
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BIOLOGICAL SCIENCE BUILDING
CONTRA COSTA COLLEGE
2600 MISSION BELL DRIVE
SAN PABLO, CA

Micro Log In **281877**
 Total Samples 144
 Date Sampled 05/24/2021
 Date Received 06/02/2021
 Date Analyzed 06/03/2021

SAMPLE IDENTIFICATION**ASBESTOS QUANTITY (AREA %) / TYPES / LAYERS****DOMINANT
OTHER MATERIALS**

If absent, ND is Reported (No Asbestos Detected)

Client #: BIO-A115 Micro #: 281877-111 Analyst: JM LIGHT GRAY HVAC SEAM MASTIC ROOF FROM NEWER HVAC UNIT DUCT	ND	NFM: RESILIENT ORGANICALLY BOUND MATERIALS, MISC. PARTICLES
Client #: BIO-A116 Micro #: 281877-112 Analyst: JM DARK GRAY HVAC SEAM MASTIC ROOF SOUTHWEST CORNER OF HVAC UNIT	ND	NFM: RESILIENT ORGANICALLY BOUND MATERIALS, MISC. PARTICLES
Client #: BIO-A117 Micro #: 281877-113 Analyst: JM DARK GRAY HVAC SEAM MASTIC ROOF NORTHWEST CORNER OF HVAC UNIT	ND	2% CELLULOSE NFM: RESILIENT ORGANICALLY BOUND MATERIALS, MISC. PARTICLES
Client #: BIO-A118 Micro #: 281877-114 Analyst: JM BEIGE SEALANT ON EXHAUST FAN SEAM ROOF NORTHWEST FROM OLD HVAC VENT	ND	NFM: RESILIENT ORGANICALLY BOUND MATERIALS, MISC. PARTICLES
Client #: BIO-A119 Micro #: 281877-115 Analyst: JM BEIGE SEALANT ON EXHAUST FAN SEAM ROOF NORTHWEST FROM OLD HVAC VENT	ND	NFM: RESILIENT ORGANICALLY BOUND MATERIALS, MISC. PARTICLES

Technical Supervisor: 

Baojia Ke, Ph.D.

6/4/2021

Date Reported

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PROJECT:
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BIOLOGICAL SCIENCE BUILDING
CONTRA COSTA COLLEGE
2600 MISSION BELL DRIVE
SAN PABLO, CA

Micro Log In **281877**
 Total Samples 144
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SAMPLE IDENTIFICATION		ASBESTOS QUANTITY (AREA %) / TYPES / LAYERS	DOMINANT OTHER MATERIALS
		If absent, ND Is Reported (No Asbestos Detected)	
Client #:	BIO-A120		
Micro #: 281877-116	Analyst: JM SILVER ALUMINUM WITH BLACK ADHESIVE DUCT LINING NORTHWEST FROM OLD HVAC VENT	ALUMINUM: ND ADHESIVE (BLACK): ND	NFM: RESILIENT ORGANICALLY BOUND MATERIALS, MISC. PARTICLES
Client #:	BIO-A121		
Micro #: 281877-117	Analyst: JM SILVER ALUMINUM WITH BLACK ADHESIVE DUCT LINING NORTHWEST FROM OLD HVAC VENT	ALUMINUM: ND ADHESIVE (BLACK): ND	NFM: RESILIENT ORGANICALLY BOUND MATERIALS, MISC. PARTICLES
Client #:	BIO-A124		
Micro #: 281877-118	Analyst: JM BLACK COATING ON ROOF ACCESS LADDER ROOM 3 BOILER ROOM NORTHEAST CORNER	ND	NFM: RESILIENT ORGANICALLY BOUND MATERIALS, MISC. PARTICLES
Client #:	BIO-A115		
Micro #: 281877-119	Analyst: JM BLACK COATING ON ROOF ACCESS LADDER ROOM 3 BOILER ROOM NORTHEAST CORNER	ND	NFM: RESILIENT ORGANICALLY BOUND MATERIALS, MISC. PARTICLES
Client #:	BIO-A126		
Micro #: 281877-120	Analyst: SS AF STUCCO EXT. NORTH AT ENTRY SOFFIT CEILING	STUCCO: ND SKIM COAT: < 1% CHRYSOTILE ASBESTOS	NFM: ROCK FRAGMENTS, CARBONATE, BINDER

Technical Supervisor: 

Baojia Ke, Ph.D.

6/4/2021

Date Reported

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	If absent, ND is Reported (No Asbestos Detected)	

Client #: BIO-A127 Micro #: 281877-121 Analyst: SS AF STUCCO SOUTH AT ENTRY SOFFIT	STUCCO: ND SKIM COAT: < 1% CHRYSOTILE ASBESTOS	NFM: ROCK FRAGMENTS, CARBONATE, BINDER
Client #: BIO-A128 Micro #: 281877-122 Analyst: AF STUCCO EXT. SOUTH AT ENTRY SOFFIT	STUCCO: ND SKIM COAT: < 1% CHRYSOTILE ASBESTOS	NFM: ROCK FRAGMENTS, CARBONATE, BINDER
Client #: BIO-A129 Micro #: 281877-123 Analyst: SS CONCRETE SLAB ROOM 22	ND	NFM: ROCK FRAGMENTS, CARBONATE, BINDER
Client #: BIO-A130 Micro #: 281877-124 Analyst: SS CONCRETE SLAB ROOM 4 BOILER ROOM	ND	NFM: ROCK FRAGMENTS, CARBONATE, BINDER
Client #: BIO-A131 Micro #: 281877-125 Analyst: SS CONCRETE SLAB EXT. WEST SIDED SOUTH END	2% CHRYSOTILE ASBESTOS	NFM: ROCK FRAGMENTS, CARBONATE, BINDER.

Technical Supervisor: 

Baojia Ke, Ph.D.

6/4/2021

Date Reported

NVLAP Lab Code 101872-0 (TESTING). Analyses use Polarized Light Microscopy (PLM), Micro Analytical SOP PLM-101. Basic techniques follow EPA - Appendix E to Subpart E of 40 CFR Part 763; Interim Method for the Determination of Asbestos in Bulk Insulation Samples" (originally published 1982), and EPA-600/R93-116 (1993). The 1993 method covers all types of bulk materials and is based on the 1982 Method, with improved analytical techniques for layered samples as required for NESHAP compliance. Asbestos is quantified by calibrated visual estimation. Detection limit is material dependent. Detection of asbestos traces (much less than 1%) may not be reliable or reproducible by PLM. Weight % cannot be determined by PLM. Asbestos with diameter below ~1 µm may not be detected by PLM. Absence of asbestos in dust, debris, and some compact materials, including floor tiles, cannot be conclusively established by PLM, and should be confirmed by Transmission Electron Microscopy (TEM). Interferences may prevent detection of small asbestos fibers, and hinder determination of some optical properties. Tremolite-asbestos or actinolite-asbestos may be indistinguishable by PLM from some similar, non-regulated amphiboles (e.g. the "Libby Amphiboles" richterite and winchite), and should be confirmed by TEM. The lower quantitation limit (reporting limit) of PLM estimation is 1%. The Cal-OSHA definition of asbestos-containing construction material is 0.1% asbestos; however, reliable determination of asbestos percent at this level cannot be done by PLM estimation; PLM Point Counting or TEM weight percent analysis are recommended. Only dominant non-asbestos materials (fibrous and non-fibrous) are listed. This analysis shall not be construed as conclusive for the presence of any reported materials other than asbestos, or for the absence of any non-asbestos material. Common interferences include, but are not limited to: cellulose, fibrous glass, other man-made vitreous fibers, synthetic fibers, elongate fragments of calcium sulfate, talc, wollastonite, animal hair, and other miscellaneous elongate particles. Sample heterogeneity is indicated by listing more than one distinct layer or material on the report. If more than one distinct sample is received in the same container, samples shall be marked with letters and analyzed separately. Layers within a sample are analyzed separately when feasible; if asbestos is detected, percentages are reported for individual layers. Interlayer contamination is possible among any layers in a sample. The notation ND (or "NONE DETECTED") indicates a result of "NO ASBESTOS DETECTED" in a homogeneous sample, or in a layer of a heterogeneous sample. Composite asbestos percentages from multiple layers are applicable only to wallboard / joint compound systems; compositing is based on customers' descriptions of material as "joint compound". Customers are solely responsible for identification and description of bulk materials listed on field forms. Laboratory descriptions may differ from those given by customers. Quality Control (QC): all results have been determined to be within acceptance limits prior to reporting. Reanalyzed samples are denoted by two sets of analyst initials. Unless otherwise stated herein, all samples were received in acceptable condition for analysis. This report must not be used to claim product endorsement by NIST or any U.S. Government agency. This report shall not be reproduced except in full, without the approval of Micro Analytical Laboratories, Inc., and pertains only to the samples analyzed as received. NFM = Non-fibrous materials.

MICRO ANALYTICAL LABORATORIES, INC.
BULK ASBESTOS ANALYSIS - POLARIZED LIGHT MICROSCOPY (PLM)



1212
 Gary Lowe
 Forensic Analytical Consulting
 21228 Cabot Boulevard
 Hayward, CA 94545

PROJECT:
PROJECT NO. PJ63338
BIOLOGICAL SCIENCE BUILDING
CONTRA COSTA COLLEGE
2600 MISSION BELL DRIVE
SAN PABLO, CA

Micro Log In **281877**
 Total Samples 144
 Date Sampled 05/24/2021
 Date Received 06/02/2021
 Date Analyzed 06/03/2021

SAMPLE IDENTIFICATION	ASBESTOS QUANTITY (AREA %) / TYPES / LAYERS	DOMINANT OTHER MATERIALS
If absent, ND is Reported (No Asbestos Detected)		
Client #: BIO-A132 Micro #: 281877-126 Analyst: SS AF WHITE CAULK PUTTY LIKE EXT. SOUTH SIDE AT ENTRY BETWEEN BRICK AND METAL WINDOW FRAME	ND	25 % TALC NFM: CARBONATE, BINDER.
Client #: BIO-A133 Micro #: 281877-127 Analyst: SS WHITE CAULK PUTTY LIKE EXT. NORTH SIDE AT ENTRY BETWEEN BRICK AND METAL WINDOW FRAME	ND	25 % TALC NFM: CARBONATE, BINDER.
Client #: BIO-A134 Micro #: 281877-128 Analyst: SS LIGHT GRAY CAULK EXT. EAST SIDE SOUTH END BETWEEN GLASS AND WINDOW FRAME	2% CHRYSOTILE ASBESTOS	2 % TALC NFM: CARBONATE, BINDER.
Client #: BIO-A135 Micro #: 281877-129 Analyst: LIGHT GRAY CAULK EXT. WEST SIDE NORTH END BETWEEN GLASS AND WINDOW FRAME	NOT ANALYZED (PRIOR POSITIVE)	NFM:
Client #: BIO-A136 Micro #: 281877-130 Analyst: SS DUCT WRAP OVER FIBERGLASS ROOM 26	INSULATION: ND MESH: ND	12 % CELLULOSE 85 % FIBROUS GLASS NFM: GLASS FRAGMENTS, BINDER.

Technical Supervisor: 

Baojia Ke, Ph.D.

6/4/2021

Date Reported

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BULK ASBESTOS ANALYSIS - POLARIZED LIGHT MICROSCOPY (PLM)



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Hayward, CA 94545

PROJECT:
PROJECT NO. PJ63338
BIOLOGICAL SCIENCE BUILDING
CONTRA COSTA COLLEGE
2600 MISSION BELL DRIVE
SAN PABLO, CA

Micro Log In **281877**
Total Samples 144
Date Sampled 05/24/2021
Date Received 06/02/2021
Date Analyzed 06/03/2021

SAMPLE IDENTIFICATION**ASBESTOS QUANTITY (AREA %) / TYPES / LAYERS****DOMINANT OTHER MATERIALS**

If absent, ND is Reported (No Asbestos Detected)

Client #: BIO-A137			
Micro #: 281877-131 Analyst: SS DUCT WRAP OVER FIBERGLASS ROOM 37	INSULATION: ND MESH: ND	12 % CELLULOSE 85 % FIBROUS GLASS NFM: GLASS FRAGMENTS, BINDER.	
Client #: BIO-A138			
Micro #: 281877-132 Analyst: SS DUCT WRAP OVER FIBERGLASS ROOM 13	INSULATION: ND MESH: ND	10 % CELLULOSE 85 % FIBROUS GLASS NFM: GLASS FRAGMENTS, BINDER.	
Client #: BIO-A139			
Micro #: 281877-133 Analyst: SS TAR AND GRAVEL ROOF FIELD ROOF SOUTHEAST CORNER	TAR / GRAVEL: ND GLOSSY TAR: ND	15 % CELLULOSE 5 % FIBROUS GLASS NFM: TAR/ASPHALT, BINDER	
Client #: BIO-A140			
Micro #: 281877-134 Analyst: SS TAR AND GRAVEL ROOF FIELD ROOF CENTRAL	TAR / GRAVEL: ND GLOSSY TAR: ND	15 % CELLULOSE 5 % FIBROUS GLASS NFM: TAR/ASPHALT, BINDER	
Client #: BIO-A141			
Micro #: 281877-135 Analyst: SS TAR AND GRAVEL ROOF FIELD ROOF NORTH SIDE	TAR / GRAVEL: ND GLOSSY TAR: ND	15 % CELLULOSE 5 % FIBROUS GLASS NFM: TAR/ASPHALT, BINDER	

Technical Supervisor: 

Baojia Ke, Ph.D.

6/4/2021

Date Reported

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BULK ASBESTOS ANALYSIS - POLARIZED LIGHT MICROSCOPY (PLM)



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PROJECT:
PROJECT NO. PJ63338
BIOLOGICAL SCIENCE BUILDING
CONTRA COSTA COLLEGE
2600 MISSION BELL DRIVE
SAN PABLO, CA

Micro Log In **281877**
Total Samples 144
Date Sampled 05/24/2021
Date Received 06/02/2021
Date Analyzed 06/03/2021

SAMPLE IDENTIFICATION	ASBESTOS QUANTITY (AREA %) / TYPES / LAYERS	DOMINANT OTHER MATERIALS
If absent, ND is Reported (No Asbestos Detected)		

Client #: BIO-A142 Micro #: 281877-136 Analyst: SS PIPE LAGGING (JACKET) OVER FIBERGLASS ON 4" OD PIPE RUN ROOM 41	INSULATION: ND MESH / COATING: ND	15 % CELLULOSE 80 % FIBROUS GLASS NFM: BINDER, OTHER, MISCELLANEOUS.
Client #: BIO-A143 Micro #: 281877-137 Analyst: SS PIPE LAGGING (JACKET) OVER FIBERGLASS ON 4" OD PIPE RUN ROOM 17	INSULATION: ND MESH / COATING: ND	15 % CELLULOSE 80 % FIBROUS GLASS NFM: BINDER, OTHER, MISCELLANEOUS.
Client #: BIO-A144 Micro #: 281877-138 Analyst: SS PIPE LAGGING (JACKET) OVER FIBERGLASS ON 4" OD PIPE RUN ROOM 43	INSULATION: ND MESH / COATING: ND	15 % CELLULOSE 80 % FIBROUS GLASS NFM: BINDER, OTHER, MISCELLANEOUS.
Client #: BIO-A145 Micro #: 281877-139 Analyst: SS 1" X 1" GRAY CERAMIC FLOOR TILE WITH GRAY GROUT OFF-WHITE MORTAR MEN'S RESTROOM	CERAMIC TILE: ND GROUT: ND MORTAR: ND	NFM: ROCK FRAGMENTS, CARBONATE, BINDER
Client #: BIO-A146 Micro #: 281877-140 Analyst: SS 1" X 1" GRAY CERAMIC FLOOR TILE WITH GRAY GROUT OFF-WHITE MORTAR MEN'S RESTROOM	CERAMIC TILE: ND GROUT: ND MORTAR: ND	NFM: ROCK FRAGMENTS, CARBONATE, BINDER

Technical Supervisor: Baojia Ke, Ph.D.

6/4/2021

Date Reported

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BULK ASBESTOS ANALYSIS - POLARIZED LIGHT MICROSCOPY (PLM)



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PROJECT:
PROJECT NO. PJ63338
BIOLOGICAL SCIENCE BUILDING
CONTRA COSTA COLLEGE
2600 MISSION BELL DRIVE
SAN PABLO, CA

Micro Log In **281877**
 Total Samples 144
 Date Sampled 05/24/2021
 Date Received 06/02/2021
 Date Analyzed 06/03/2021

SAMPLE IDENTIFICATION	ASBESTOS QUANTITY (AREA %) / TYPES / LAYERS	DOMINANT OTHER MATERIALS
	If absent, ND is Reported (No Asbestos Detected)	

Client #: BIO-A147 Micro #: 281877-141 Analyst: SS OFF-WHITE HVAC SEAM TAPE EAST ROOM 39	COATING (WHITE): ND MESH: ND	30 % CELLULOSE NFM: CARBONATE, BINDER.
Client #: BIO-A148 Micro #: 281877-142 Analyst: SS OFF-WHITE HVAC SEAM TAPE ROOM 21	COATING (WHITE): ND MESH: ND	30 % CELLULOSE NFM: CARBONATE, BINDER.
Client #: BIO-A149 Micro #: 281877-143 Analyst: SS BLACK MOISTURE BARRIER EXT. EAST SIDE SOUTH END BEHIND UPPER WALL WOOD PANEL	CELLULOSE / TAR: ND	45 % CELLULOSE NFM: TAR BINDER
Client #: BIO-A150 Micro #: 281877-144 Analyst: SS BLACK MOISTURE BARRIER EXT. EAST SIDE SOUTH END BEHIND UPPER WALL WOOD PANEL	CELLULOSE / TAR: ND	45 % CELLULOSE NFM: TAR BINDER

Technical Supervisor: 

Baojia Ke, Ph.D.

6/4/2021

Date Reported

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Sampling Data Form / Chain of custody

NOTE Stop @ first positive!!

281877

Client: HAY01

Site: Contra Costa College 2600 Mission Bell Drive San Pablo, CA USA

Sampled By: M.A.

FACS: San Francisco, CA Office

Critical Solutions, Inc.

(Biological Science Bldg)

PO02886

Sample Date: 05/24/21 - 05/28/21


Proj #: PJ63338

Turnaround Time:	RUSH	24hr	48hr	Extended (<u>5</u> days)
Analysis:	<input checked="" type="checkbox"/> PLM Standard:	<input type="checkbox"/> PLM w/ Point Count: (<u> </u> 400pt. <u> </u> 1,000 pt.):		
Email results to:	FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com & malwareza@forensicanalytical.com			

NOTE Stop @ first positive!!

HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I./Cat II.	Condition	Sample #	Sample Location	Lab result
01	TAN sheet flooring w/ mottle pattern		Y	G	Bio-A001	RM 18, SE. Corner	1
↓	↓		↓	↓	↓	↓	↓
02	Beige sheet flooring w/ mottle pattern				-A002	RM 7, NW Corner	2
					-A003	RM 18, West Side, Patches on floor	3
↓	↓		↓	↓	↓	↓	↓
04	white Adhesive (on metal HVAC pins)		N		-A004	RM 2, East side	4
↓	↓		↓	↓	↓	↓	↓
05	Gray HVAC Sealant mastic				-A005	RM 16	5
					-A006	RM 16	6
↓	↓		↓	↓	↓	↓	↓
					-A007	RM 16	7
					-A008	RM 7	8

YW = Drywall, JC = Joint Compound, WT=Wall Texture, VFT = Vinyl Floor Tile, VSF = Vinyl Sheet Flooring, BB = Baseboard, BBM = Baseboard Mastic, CM = Carpet Mastic, ACT = Acoustic Ceiling Tile, ACS = Sprayed-on Acoustic Ceiling Material, FP = Fireproofing, PI = Pipe Insulation, PFI = Pipe fitting insulation, WP = Plaster, CP = Ceiling Plaster, ES = Exterior Stucco

Relinquished by:  Date and Time: 05/21/21	Relinquished by: Date and Time:	Relinquished by: Date and Time:
Received by: Kao Saitel Date and Time: 6/2/2018	Received by: Date and Time:	Received by: Date and Time:

Sampling Data Form / Chain of custody

28/877

Client: HAY01

Site: Contra Costa College 2600 Mission Bell Drive San Pablo, CA USA

Sampled By: M.A.

FACS: San Francisco, CA Office

Sample Date: 05/24/21 - 05/28/21

Critical Solutions, Inc.

Proj #: PJ63338

Turnaround Time:	RUSH	24hr	48hr	Extended (<u>5</u> days)
Analysis:	<input checked="" type="checkbox"/> PLM Standard:	<input type="checkbox"/> PLM w/ Point Count: (<u> </u> 400pt. <u> </u> 1,000 pt.):		
Email results to:	FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com			

HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I./Cat II.	Condition	Sample #	Sample Location	Lab result
03	2'x4' white Acoustical Ceiling Tile w/ Fissure pattern		Y	G	Bio-A009	RM 18	9
↓	↓		↓		-A010	corridor East wall on South end	10
06	Black w/ gray streaks Floor Mat		N		-A011	RM 16	11
↓	↓		↓		-A012	RM 16	12
07	JC/WB		Y		-A013	RM 18, South East corner wall	13
↓	↓		↓		-A014	RM 26, South East corner	14
↓	↓		↓		-A015	RM 3 (Boiler Room)	15
↓	↓		↓		-A016	Jan Closet, next to RM 7	16

W = Drywall, JC = Joint Compound, WT=Wall Texture, VFT = Vinyl Floor Tile, VSF = Vinyl Sheet Flooring, BB = Baseboard, BBM = Baseboard Mastic, CM = Carpet Mastic, ACT = Acoustic Ceiling Tile, ACS = Sprayed-on Acoustic Ceiling Material, FP = Fireproofing, PI = Pipe Insulation, PFI = Pipe fitting insulation, WP = Plaster, CP = Ceiling Plaster, ES = Exterior Stucco

Relinquished by: <u>[Signature]</u> Date and Time: <u>05/31/21</u>	Relinquished by: Date and Time:	Relinquished by: Date and Time:
Received by: <u>Kas Sarker</u> Date and Time: <u>6/2/2021</u> 8PM	Received by: Date and Time:	Received by: Date and Time:

Sampling Data Form / Chain of custody

28/877

Client: HAY01

Site: Contra Costa College 2600 Mission Bell Drive San Pablo, CA USA

Sampled By: M.A.

FACS: San Francisco, CA Office

Sample Date: 05/24/21 - 05/28/21


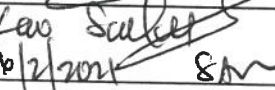
Critical Solutions, Inc.

Proj #: PJ63338

Turnaround Time:	RUSH	24hr	48hr	Extended (<u>5</u> days)
Analysis:	<input checked="" type="checkbox"/> PLM Standard:	<input type="checkbox"/> PLM w/ Point Count: (<input type="checkbox"/> 400pt. <input type="checkbox"/> 1,000 pt.):		
Email results to:	FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com			

HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I./Cat II.	Condition	Sample #	Sample Location	Lab result
08	Brown BBM		N	G	Bio-A017	RM 18, East Wall	
↓	↓		↓	↓	-A018	RM 35	17
09	1" x 1" Gray ceramic tile w/ Black specks w/ off white grout, w/ off white mortar		↓	↓	-A019	RM 24, Counter top	18
↓	↓		↓	↓	-A020	RM 18	19
10	TSI (on 4" OD pipe run)		Y	↓	-A021	RM 22, North west corner	20
↓	↓		↓	↓	-A022	RM 22	21
↓	↓		↓	↓	-A023	RM 22	22
12	2' x 4' White Acoustical ceiling tile w/ pin hole pattern		Y	↓	-A024	RM 24	23
							24

W = Drywall, JC = Joint Compound, WT = Wall Texture, VFT = Vinyl Floor Tile, VSF = Vinyl Sheet Flooring, BB = Baseboard, BBM = Baseboard Mastic, CM = Carpet Mastic, ACT = Acoustic Ceiling Tile, ACS = Sprayed-on Acoustic Ceiling Material, FP = Fireproofing, PI = Pipe Insulation, PFI = Pipe fitting insulation, WP = Plaster, CP = Ceiling Plaster, ES = Exterior Stucco

Relinquished by:  Date and Time: 05/28/21 06/02/21	Relinquished by: Date and Time:	Relinquished by: Date and Time:
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Sampling Data Form / Chain of custody

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28/87

Client: HAY01

Site: Contra Costa College 2600 Mission Bell Drive San Pablo, CA USA

Sampled By: M.A.

FACS: San Francisco, CA Office

Sample Date: 05/24/21 - 05/29/21

Critical Solutions, Inc.

Proj #: PJ63338

Turnaround Time:	RUSH	24hr	48hr	Extended (<u>5</u> days)
Analysis:	<input checked="" type="checkbox"/> PLM Standard:	<input type="checkbox"/> PLM w/ Point Count: (<u> </u> 400pt. <u> </u> 1,000 pt.):		
Email results to:	FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com			

HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I./Cat II.	Condition	Sample #	Sample Location	Lab result
12	2' x 4' white Acoustical ceiling tile w/ pinhole pattern		Y	G	BIO-A025	center of RM 39	25
13	12" x 12" Ft off white w/ Gray streaks w/ yellow mastic		N		-A026	RM, 28 A on FL	26
↓	↓				-A027	RM, 28 A on FL	27
14	Red Brick and Gray mortar				-A030	RM, 26 North wall	28
↓	↓				-A031	Ext. South entrance	29
15	12" x 12" Ft tile w/ blue specks over yellow mastic				-A032	Corridor, South side	30
↓	↓				-A033	Mens restroom vestibule, NW corner	31
18	Green Carpet Mastic				-A034	RM 43, SW corner	32

W = Drywall, JC = Joint Compound, WT=Wall Texture, VFT = Vinyl Floor Tile, VSF = Vinyl Sheet Flooring, BB = Baseboard, BBM = Baseboard Mastic, CM = Carpet Mastic, ACT = Acoustic Ceiling Tile, ACS = Sprayed-on Acoustic Ceiling Material, FP = Fireproofing, PI = Pipe Insulation, PFI = Pipe fitting insulation, WP = Plaster, CP = Ceiling Plaster, ES = Exterior Stucco

Relinquished by: <u>[Signature]</u> Date and Time: <u>05/31/21</u>	Relinquished by: Date and Time:	Relinquished by: Date and Time:
Received by: <u>[Signature]</u> Date and Time: <u>6/2/21</u>	Received by: Date and Time:	Received by: Date and Time:

Sampling Data Form / Chain of custody

281877

Client: HAY01
FACS: San Francisco, CA Office
 Critical Solutions, Inc.

Site: Contra Costa College 2600 Mission Bell Drive San Pablo, CA USA

Sampled By: M.A.
Sample Date: 05/24/21 - 05/28/21
Proj #: PJ63338

Turnaround Time:	RUSH 24hr 48hr Extended (<u>5</u> days)
Analysis:	<input checked="" type="checkbox"/> PLM Standard: <input type="checkbox"/> PLM w/ Point Count: (<input type="checkbox"/> 400pt. <input type="checkbox"/> 1,000 pt.):
Email results to:	FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com

HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I/Cat II.	Condition	Sample #	Sample Location	Lab result
18	Green Carpet Mastic		N	G	Bio-035	RM 43, SE Corner	34
16	Knock down WT (on wood panel walls)		Y		-036	Corridor, NORTH SIDE - WEST END	34
					-037	Corridor, East, NEXT TO RM37	35
					-038	Corridor, WEST NEXT TO RM18	36
					-039	Corridor, East NEXT TO RM13	37
					-040	South END, NEXT TO RM2	38
26	Dark Tan RSF with Mottle Pattern				-041	RM B-8, NW Corner	39
					V-042	RM 39 NW Corner	40

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Sampling Data Form / Chain of custody

Page 6 19

28/877

Client: HAY01

Site: Contra Costa College 2600 Mission Bell Drive San Pablo, CA USA

Sampled By: M.A.

FACS: San Francisco, CA Office

Sample Date: 05/24/21 - 05/28/21


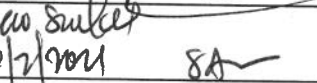
Critical Solutions, Inc.

Proj #: PJ63338

Turnaround Time:	RUSH	24hr	48hr	Extended (<u>5</u> days)
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HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I./Cat II.	Condition	Sample #	Sample Location	Lab result
11	pipe Elbow (on 4" OD pipe run)		Y	G	Bio-A043	RM 41	Y1
↓	↓		↓	X	-A044	RM 17	Y2
↓	↓		↓	✓	-A045	RM 43	Y3
17	Plaster		N	✓	-A046	West wall in Wash room	Y4
↓	↓		↓	✓	-A047	NORT wall in Study room	Y5
↓	↓		↓	✓	-A048	women's RR	Y6
↓	↓		↓	✓	-A049	↓	Y7
↓	↓		↓	X	-A050	Men's RR	Y8

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Relinquished by:  Date and Time: 05/24/21	Relinquished by: Date and Time:	Relinquished by: Date and Time:
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Sampling Data Form / Chain of custody

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Client: HAY01
FACS: San Francisco, CA Office
 Critical Solutions, Inc.


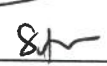
Site: Contra Costa College 2600 Mission Bell Drive San Pablo, CA USA

Sampled By: M.A.
Sample Date: 05/24/21 - 09/28/21
Proj #: PJ63338

Turnaround Time:	RUSH 24hr 48hr Extended (<u>5</u> days)
Analysis:	<input checked="" type="checkbox"/> PLM Standard: <input type="checkbox"/> PLM w/ Point Count: (<u> </u> 400pt. <u> </u> 1,000 pt.):
Email results to:	FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com

HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I./Cat II.	Condition	Sample #	Sample Location	Lab result
19	4" x 4" off-white Ceramic wall tile w/ off-white grout / w off-white grout		N	G	Bio-A051	East wall of RM 43	49
↓	↓		↓	↓	-A052	East wall of RM 43	50
20	Yellow wall panel Adhesive		↓	↓	-A053	East wall of RM 43	51
↓	↓		↓	↓	-A054	West wall of RM 43	52
21	Yellow/Beige BBM		↓	↓	-A055	RM 26	53
↓	↓		↓	↓	-A056	⊕ RM 2	54
22	Fiberglass Pipe Lagging (sacket) over on 6" OD pipe run		Y	↓	-A057	RM 26	55
↓	↓		↓	↓	-A058	RM 3	56

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Sampling Data Form / Chain of custody

Client: HAY01

Site: Contra Costa College 2600 Mission Bell Drive San Pablo, CA USA

Sampled By: M.A.

28/877

FACS: San Francisco, CA Office

Sample Date: 09/24/21 - 09/28/21


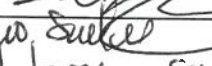
Critical Solutions, Inc.

Proj #: PJ63338

Turnaround Time:	RUSH	24hr	48hr	Extended (<u>5</u> days)
Analysis:	<input checked="" type="checkbox"/> PLM Standard:	<input type="checkbox"/> PLM w/ Point Count:	(<input type="checkbox"/> 400pt. <input type="checkbox"/> 1,000 pt.):	
Email results to:	FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com			

HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I./Cat II.	Condition	Sample #	Sample Location	Lab result
22	Pipe lagging (Jacket) over fiberglass (on 6" OD pipe run)		Y	G	BIO-A059	RM1	57
23	pipe Elbow (on 6" OD pipe run)		↓	↓	-A060	RM1	58
↓	↓		↓	↓	-A061	RM2 East wall South end above door	59
↓	↓		↓	↓	-A062	RM43	60
24	Black Chalk Board		N	↓	-A063	RM39	61
↓	↓		↓	↓	-A064	RM2	62
25	White Insulation (on sink pipe drains)		Y	↓	-A065	RM24	63
↓	↓		↓	↓	-A066	RM39	64

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Sampling Data Form / Chain of custody

28/877

Client: HAY01
 FACS: San Francisco, CA Office
 Critical Solutions, Inc.


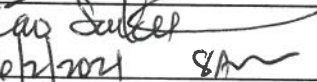
Site: Contra Costa College 2600 Mission Bell Drive San Pablo, CA USA

Sampled By: M.A.
 Sample Date: 05/24/21 - 05/28/21
 Proj #: PJ63338

Turnaround Time:	RUSH	24hr	48hr	Extended (<u>5</u> days)
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Email results to:	FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com			

HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I./Cat II.	Condition	Sample #	Sample Location	Lab result
27	TRANSIT Exhaust FIVE	VOID		G	310-A067	RM 41	X
	VOID	VOID			A068	RM 41	X
28	RED Fire stop				-A069	RM 41	65
					-A070	RM 3	66
29	Black Counter tops				-A071	RM 39	67
					-A072	RM 22	68
30	Gray Counter tops				-A073	SOUTH Wall of RM 41	69
					-A074	RM 17	70

YW = Drywall, JC = Joint Compound, WT=Wall Texture, VFT = Vinyl Floor Tile, VSF = Vinyl Sheet Flooring, BB = Baseboard, BBM = Baseboard Mastic, CM = Carpet Mastic, ACT = Acoustic Ceiling Tile, ACS = Sprayed-on Acoustic Ceiling Material, FP = Fireproofing, PI = Pipe Insulation, PFI = Pipe fitting insulation, WP = Plaster, CP = Ceiling Plaster, ES = Exterior Stucco

Relinquished by:  Date and Time: 05/31/21 06/02/21	Relinquished by: Date and Time:	Relinquished by: Date and Time:
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Sampling Data Form / Chain of custody

281877

Client: HAY01
FACS: San Francisco, CA Office
 Critical Solutions, Inc.

Site: Contra Costa College 2600 Mission Bell Drive San Pablo, CA USA

Sampled By: M.A.
Sample Date: 05/24/21 - 05/28/21
Proj #: PJ63338

Turnaround Time:	RUSH 24hr 48hr Extended (<u>5</u> days)
Analysis:	<input checked="" type="checkbox"/> PLM Standard: <input type="checkbox"/> PLM w/ Point Count: (<u> </u> 400pt. <u> </u> 1,000 pt.):
Email results to:	FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com

HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I./Cat II.	Condition	Sample #	Sample Location	Lab result
31	Orange Peel WT (on drywall)		Y	G	B10-A075	East wall north end RM 2	71
					-A076	RM B8 East wall south end	72
					-A077	RM B8 East wall north end	73
					-A078	RM 6 South wall	74
					-A079	RM 12	75
32	JCLWB (on dry wall w/ orange peel WT)				-A080	RM B8 southeast corner	76
					-A081	RM 6, S. wall, East Entry	77
					-A082	RM 12	78

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Received by: <i>[Signature]</i> Date and Time: 6/2/2021	Received by: Date and Time:	Received by: Date and Time:

Sampling Data Form / Chain of custody

28/877

Client: HAY01
FACS: San Francisco, CA Office
 Critical Solutions, Inc.

Site: Contra Costa College 2600 Mission Bell Drive San Pablo, CA USA

Sampled By: M.A.

Sample Date: 05/24/21 - 05/28/21

Proj #: PJ63338

Turnaround Time:	RUSH 24hr 48hr Extended (5 days)
Analysis:	<input checked="" type="checkbox"/> PLM Standard: <input type="checkbox"/> PLM w/ Point Count: (<input type="checkbox"/> 400pt. <input type="checkbox"/> 1,000 pt.):
Email results to:	FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com

HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I./Cat II.	Condition	Sample #	Sample Location	Lab result
33	Concrete (on Equipment pads)		N	G	Bio-A083	RM 3 (Boiler-RM), ^{upper} west side	79
↓	↓		↓	↓	↓	↓ south wall	
34	Pipe Gaskets		N		-A084	↓ southeast corner	80
↓	↓		↓	↓	↓	↓ central south wall	
35	12"x12" off-white wall tiles over brown mastic		Y		-A085		81
↓	↓		↓	↓	↓	↓ north wall	
36	TANK Insulation		Y		-A086	RM 1	82
↓	↓		↓	↓	↓	↓ north wall	
36	TANK Insulation		Y		-A087	RM 3 (Boiler-RM),	83
↓	↓		↓	↓	↓	↓	
36	TANK Insulation		Y		-A088	RM 3 (Boiler-RM),	84
↓	↓		↓	↓	↓	↓	
36	TANK Insulation		Y		-A089	RM 3 (Boiler-RM),	85
↓	↓		↓	↓	↓	↓	
36	TANK Insulation		Y		-A090	RM 3 (Boiler-RM),	86

WW = Drywall, JC = Joint Compound, WT=Wall Texture, VFT = Vinyl Floor Tile, VSF = Vinyl Sheet Flooring, BB = Baseboard, BBM = Baseboard Mastic, CM = Carpet Mastic, ACT = Acoustic Ceiling Tile, ACS = Sprayed-on Acoustic Ceiling Material, FP = Fireproofing, PI = Pipe Insulation, PFI = Pipe fitting insulation, WP = Plaster, CP = Ceiling Plaster, ES = Exterior Stucco

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Sampling Data Form / Chain of custody

281877

Client: HAY01
FACS: San Francisco, CA Office
 Critical Solutions, Inc.

Site: Contra Costa College 2600 Mission Bell Drive San Pablo, CA USA

Sampled By: M.A.

Sample Date: 05/24/21 - 05/28/21

Proj #: PJ63338

Turnaround Time:	RUSH 24hr 48hr Extended (<u>5</u> days)
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Email results to:	FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com

HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I./Cat II.	Condition	Sample #	Sample Location	Lab result
36	TANK Insulation		Y	G	Bio-A091	RM 3 (Boiler RM)	87
37	White HVAC vibration Dampener		↓	↓	-A092	RM 26	88
↓	↓		↓	↓	-A093	RM 37	89
38	Green HVAC vibration Dampener		↓	↓	-A094	RM 26	90
↓	↓		↓	↓	-A095	RM 37	91
39	Black mastic (on HVAC coils drip pan)		N	↓	-A096	RM 26	92
↓	↓		↓	↓	-A097	RM 37	93
58	White cloth HVAC gasket (on HVAC connection)		Y	↓	-A098	RM 13	94

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Sampling Data Form / Chain of custody

281877

Client: HAY01
FACS: San Francisco, CA Office
 Critical Solutions, Inc.


Site: Contra Costa College 2600 Mission Bell Drive San Pablo, CA USA

Sampled By: M.A.
Sample Date: 05/24/21 - 05/28/21
Proj #: PJ63338

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HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I./Cat II.	Condition	Sample #	Sample Location	Lab result
* 58	White cloth HVAC gasket (on HVAC connection)		Y	G	Bio-A099	RM 13	95
40	Roof curb flashing		N		Bio-A100	Roof South side	96
↓	↓		↓		-A101	West side, North End	97
41	Gray/Black Roof penetration mastic		↓		-A102	Exhaust penetration flue	98
↓	↓		↓		-A103	Exhaust penetration flue	99
42	Off-white Insulation (on pipe bracket support)		Y		-A104	South, west corner chilled water return line	100
↓	↓		↓		-A105	West side of HVAC unit	101
43	Gray HVAC seam mastic		N		-A106	Central, from old HVAC	102

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Relinquished by:  Date and Time: 05/31/21 06/02/21	Relinquished by: Date and Time:	Relinquished by: Date and Time:
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Sampling Data Form / Chain of custody

281877

Client: HAY01
FACS: San Francisco, CA Office
 Critical Solutions, Inc.

Site: Contra Costa College 2600 Mission Bell Drive San Pablo, CA USA

Sampled By: M.A.
Sample Date: 05/24/21 - 05/29/21
Proj #: PJ63338

Turnaround Time:	RUSH 24hr 48hr Extended (<u>5</u> days)
Analysis:	<input checked="" type="checkbox"/> PLM Standard: <input type="checkbox"/> PLM w/ Point Count: (<input type="checkbox"/> 400pt. <input type="checkbox"/> 1,000 pt.):
Email results to:	FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com

HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I./Cat II.	Condition	Sample #	Sample Location	Lab result
43	Gray HVAC seam mastic		N	G	Bio-A107	Roof, S.E. Corner, from old HVAC	102
44	Gray Rolled Roof patch				-A108	S.E. Corner	104
↓	↓				-A109	North side	105
45	Gray roof mastic (on Gray rolled Roof patches)				-A110	S.E. Corner	106
↓	↓				-A111	N.E. Corner	107
46	Dark Gray sealant (on Generator exhaust DUCT Fan)				-A112	S.E. Corner	108
↓	↓				-A113		109
47	light gray HVAC seam mastic				-A114	from newer HVAC Duct DUCT	110

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Sampling Data Form / Chain of custody

281877

Client: HAY01
FACS: San Francisco, CA Office
 Critical Solutions, Inc.

Site: Contra Costa College 2600 Mission Bell Drive San Pablo, CA USA

Sampled By: M.A.

Sample Date: 05/24/21 - 05/28/21

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Analysis:	<input checked="" type="checkbox"/> PLM Standard: <input type="checkbox"/> PLM w/ Point Count: (<u> </u> 400pt. <u> </u> 1,000 pt.):
Email results to:	FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com

HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I./Cat II.	Condition	Sample #	Sample Location	Lab result
47	Light gray HVAC seam mastic		N	G	Bio-A115	Roof from newer HVAC unit Duct	111
48	Dark Gray HVAC seam mastic				-A116	South west corner of HVAC unit	112
↓	↓				-A117	North west corner of HVAC unit	113
49	Berge Sealant (on Exhaust Fan seam)				-A118	Northwest from old HVAC vent	114
↓	↓				-A119	Northwest from old HVAC vent	115
50	Silver Aluminum w/ black Adhesive Duct lining				-A120		116
↓	↓				-A121		117
51	Black Black paint and penetration mastic			X	-A122	VOID	X

JW = Drywall, JC = Joint Compound, WT=Wall Texture, VFT = Vinyl Floor Tile, VSF = Vinyl Sheet Flooring, BB = Baseboard, BBM = Baseboard Mastic, CM = Carpet Mastic, ACT = Acoustic Ceiling Tile, ACS = Sprayed-on Acoustic Ceiling Material, FP = Fireproofing, PI = Pipe Insulation, PFI = Pipe fitting insulation, WP = Plaster, CP = Ceiling Plaster, ES = Exterior Stucco

Relinquished by: Date and Time:	Relinquished by: Date and Time:	Relinquished by: Date and Time:
Received by: Date and Time:	Received by: Date and Time:	Received by: Date and Time:

Sampling Data Form / Chain of custody

Client: HAY01
FACS: San Francisco, CA Office
 Critical Solutions, Inc.

Site: Contra Costa College 2600 Mission Bell Drive San Pablo, CA USA

Sampled By: M.A. 281877
Sample Date: 05-24-21 - 05/28/21
Proj #: PJ63338

Turnaround Time:	RUSH	24hr	48hr	Extended (<u>5</u> days)
Analysis:	<input checked="" type="checkbox"/> PLM Standard: <input type="checkbox"/> PLM w/ Point Count: (<input type="checkbox"/> 400pt. <input type="checkbox"/> 1,000 pt.):			
Email results to:	FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com			

HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I./Cat II.	Condition	Sample #	Sample Location	Lab result
51	Black seam and penetration mastic VOID		N	G X	Bio-A123	Roof VOID	X
52	Black Coating (on roof access ladder)				-A124	RM 3 (Boiler RM) NORTHEAST Corner	118
↓	↓				-A125	↓ NORTHEAST Corner	119
53	Stucco				-A126	Ext. South, North, @ Entry, Soffit ceiling	120
↓	↓				-A127	↓ South, @ Entry, Soffit	121
↓	↓				-A128	Ext. North, South, @ Entry soffit	122
54	Concrete (slab)				-A129	RM 22	123
54	↓				-A130	RM 3 (Boiler-RM)	124

JW = Drywall, JC = Joint Compound, WT=Wall Texture, VFT = Vinyl Floor Tile, VSF = Vinyl Sheet Flooring, BB = Baseboard, BBM = Baseboard Mastic, CM = Carpet Mastic, ACT = Acoustic Ceiling Tile, ACS = Sprayed-on Acoustic Ceiling Material, FP = Fireproofing, PI = Pipe Insulation, PFI = Pipe fitting insulation, WP = Plaster, CP = Ceiling Plaster, ES = Exterior Stucco

Relinquished by: Date and Time: 05/31/21 06/02/21	Relinquished by: Date and Time:	Relinquished by: Date and Time:
Received by: Date and Time: 6/2/21 SA	Received by: Date and Time:	Received by: Date and Time:

Sampling Data Form / Chain of custody

28/877

Client: HAY01
FACS: San Francisco, CA Office
 Critical Solutions, Inc.

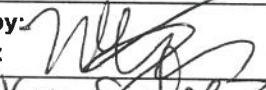
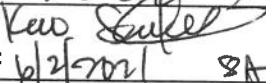
Site: Contra Costa College 2600 Mission Bell Drive San Pablo, CA USA

Sampled By: M.A.
Sample Date: 05-24-21 - 05/28/21
Proj #: PJ63338

Turnaround Time:	RUSH	24hr	48hr	Extended (<u>5</u> days)
Analysis:	<input checked="" type="checkbox"/> PLM Standard:	<input type="checkbox"/> PLM w/ Point Count: (<input type="checkbox"/> 400pt. <input type="checkbox"/> 1,000 pt.):		
Email results to:	FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com			

HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I./Cat II.	Condition	Sample #	Sample Location	Lab result
54	Concrete (slab)		N	G	Bio-A131	Ext. West side, South END	125
55	White Caulk "putty like"				-A132	Ext. South side of Entry, between brick & metal window frame.	126
↓	↓				-A133	Ext. North side of Entry, between brick & metal window frame	127
56	Light Gray Caulk				-A134	Ext. East side, North South End, between glass & window frame	128
↓	↓				-A135	↓, West side, North END, between glass & window frame	129
57	Duct wrap over fiberglass		Y		-A136	RM 26	130
↓	↓				-A137	RM 37	131
↓	↓				-A138	RM 13	132

JW = Drywall, JC = Joint Compound, WT=Wall Texture, VFT = Vinyl Floor Tile, VSF = Vinyl Sheet Flooring, BB = Baseboard, BBM = Baseboard Mastic, CM = Carpet Mastic, ACT = Acoustic Ceiling Tile, ACS = Sprayed-on Acoustic Ceiling Material, FP = Fireproofing, PI = Pipe Insulation, PFI = Pipe fitting insulation, WP = Plaster, CP = Ceiling Plaster, ES = Exterior Stucco

Relinquished by:  Date and Time: 05/31/21 @ 06/02/21	Relinquished by: Date and Time:	Relinquished by: Date and Time:
Received by:  Date and Time: 6/2/21 SA	Received by: Date and Time:	Received by: Date and Time:

Sampling Data Form / Chain of custody

281877

Client: HAY01

Site: Contra Costa College 2600 Mission Bell Drive San Pablo, CA USA

Sampled By: M.A.

FACS: San Francisco, CA Office

Sample Date: 05-24-21 - 05-28-21


Critical Solutions, Inc.

Proj #: PJ63338

Turnaround Time:	RUSH	24hr	48hr	Extended (<u>5</u> days)
Analysis:	<input checked="" type="checkbox"/> PLM Standard:	<input type="checkbox"/> PLM w/ Point Count: (<u> </u> 400pt. <u> </u> 1,000 pt.):		
Email results to:	FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com			

HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I./Cat II.	Condition	Sample #	Sample Location	Lab result
59	TAR & gravel Roof field		N	G	B10-A139	Roof, S.E. corner	133
↓	↓		↓	↓	-A140	Central	134
↓	↓		↓	↓	-A141	North side	135
60	Pipe Lagging (jacket) over fiberglass (on 4" OD pipe run)		Y	G	-A142	RM 41	136
↓	↓		↓	↓	-A143	RM 17	137
↓	↓		↓	↓	-A144	RM 43	138
61	1" x 2" Gray Ceramic Floor Tile w/ gray grout and off-white Mortar		N	G	-A145	Men's RR	139
↓	↓		↓	↓	-A146	↓	140

JW = Drywall, JC = Joint Compound, WT=Wall Texture, VFT = Vinyl Floor Tile, VSF = Vinyl Sheet Flooring, BB = Baseboard, BBM = Baseboard Mastic, CM = Carpet Mastic, ACT = Acoustic Ceiling Tile, ACS = Sprayed-on Acoustic Ceiling Material, FP = Fireproofing, PI = Pipe Insulation, PFI = Pipe fitting insulation, WP = Plaster, CP = Ceiling Plaster, ES = Exterior Stucco

Relinquished by:  Date and Time: 05/31/21 061021z	Relinquished by: Date and Time:	Relinquished by: Date and Time:
Received by: Kap Suber Date and Time: 6/2/2021	Received by: Date and Time:	Received by: Date and Time:

Sampling Data Form / Chain of custody

Page 19 19

28/877

Client: HAY01
FACS: San Francisco, CA Office
 Critical Solutions, Inc.

Site: Contra Costa College 2600 Mission Bell Drive San Pablo, CA USA

Sampled By: M.A.
Sample Date: 05/24/21 - 05/28/21
Proj #: PJ63338

Turnaround Time: RUSH 24hr 48hr Extended (5 days)

Analysis: PLM Standard: _____ PLM w/ Point Count: (_____ 400pt. _____ 1,000 pt.):

Email results to: FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com

HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I./Cat II.	Condition	Sample #	Sample Location	Lab result
62	off-white HVAC SEAM TAPE		✓	G	B10-A147	East RM 39	141
	↓		↓	↓	-A148	RM 21	142
63	Black Moisture Barrier		N	↓	-A149	Ext. East side, South End, behind upper wall wood panel	143
	↓		↓	↓	-A150	Ext. ↓	144

JW = Drywall, JC = Joint Compound, WT=Wall Texture, VFT = Vinyl Floor Tile, VSF = Vinyl Sheet Flooring, BB = Baseboard, BBM = Baseboard Mastic, CM = Carpet Mastic, ACT = Acoustic Ceiling Tile, ACS = Sprayed-on Acoustic Ceiling Material, FP = Fireproofing, PI = Pipe Insulation, PFI = Pipe fitting insulation, WP = Plaster, CP = Ceiling Plaster, ES = Exterior Stucco

Relinquished by: Date and Time: 05/31/21 12:02/21	Relinquished by: Date and Time:	Relinquished by: Date and Time:
Received by: KAO Suter Date and Time: 6/2/21 8A	Received by: Date and Time:	Received by: Date and Time:



Bulk Asbestos Analysis

(EPA Method 40CFR, Part 763, Appendix E to Subpart E and EPA 600/R-93-116, Visual Area Estimation)
NVLAP Lab Code: 101459-0

Forensic Analytical Consulting Svcs
Gary Lowe
21228 Cabot Blvd.

Hayward, CA 94545

Client ID: HAY01
Report Number: B319974
Date Received: 07/02/21
Date Analyzed: 07/06/21
Date Printed: 07/07/21
First Reported: 07/07/21

Job ID/Site: PJ63338; Critical Solutions, Inc. Contra Costa College 2600 Mission Bell Drive
San Pablo CA
Date(s) Collected: 07/02/2021

SGSFL Job ID: HAY01
Total Samples Submitted: 5
Total Samples Analyzed: 5

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
BIO-A151 Layer: Grey Cementitious Material	12443231		ND				
Total Composite Values of Fibrous Components: Cellulose (Trace)		Asbestos (ND)					
BIO-A131A Layer: Grey Cementitious Material	12443232		ND				
Total Composite Values of Fibrous Components: Cellulose (Trace)		Asbestos (ND)					
BIO-A131B Layer: Grey Cementitious Material	12443233		ND				
Total Composite Values of Fibrous Components: Cellulose (Trace)		Asbestos (ND)					
BIO-A152 Layer: Grey Cementitious Material	12443234		ND				
Total Composite Values of Fibrous Components: Cellulose (Trace)		Asbestos (ND)					
BIO-A153 Layer: Grey Cementitious Material	12443235		ND				
Total Composite Values of Fibrous Components: Cellulose (Trace)		Asbestos (ND)					

Tad Thrower, Laboratory Supervisor, Hayward Laboratory

Note: Limit of Quantification ('LOQ') = 1%. 'Trace' denotes the presence of asbestos below the LOQ. 'ND' = 'None Detected'.

Analytical results and reports are generated by SGS Forensic Laboratories (SGSFL) at the request of and for the exclusive use of the person or entity (client) named on such report. Results, reports or copies of same will not be released by SGSFL to any third party without prior written request from client. This report applies only to the sample(s) tested. Supporting laboratory documentation is available upon request. This report must not be reproduced except in full, unless approved by SGSFL. The client is solely responsible for the use and interpretation of test results and reports requested from SGSFL. SGSFL is not able to assess the degree of hazard resulting from materials analyzed. SGS Forensic Laboratories reserves the right to dispose of all samples after a period of thirty (30) days, according to all state and federal guidelines, unless otherwise specified. All samples were received in acceptable condition unless otherwise noted.

Sampling Data Form / Chain of custody

Client: HAY01
FACS: San Francisco, CA Office
 Critical Solutions, Inc.

Site: Contra Costa College 2600 Mission Bell Drive San Pablo, CA USA

Sampled By: Martin Alvarez
Sample Date: 07/02/21
Proj #: PJ63338

Turnaround Time: RUSH 24hr 48hr Extended (3 days)

Analysis: PLM Standard: PLM w/ Point Count: (400pt. 1,000 pt.):

Email results to: FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com and malvarez@forensicanalytical.com

HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I./Cat II.	Condition	Sample #	Sample Location	Lab result
54	Concrete slab		N	G	Bio-A151	RM 43	
54 64	Concrete slab		↓	↓	Bio-A131A	Ext. West side, South END, Approx 1'.6" away from where A131 was collected.	
↓	↓	Bio-A131B			Ext. East side, North END		
65	Concrete (Foundation wall)				Bio-A152	Ext. West side, North END	
↓	↓	Bio-A153			Ext. South side, Foundation wall, near Bldg Entry		

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Relinquished by: [Signature]
Date and Time: 07/02/21

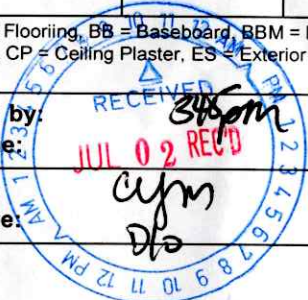
Relinquished by: [Signature]
Date and Time: [Signature]

Relinquished by:
Date and Time:

Received by: [Signature]
Date and Time:

Received by: [Signature]
Date and Time:

Received by:
Date and Time:





Bulk Asbestos Analysis

(EPA Method 40CFR, Part 763, Appendix E to Subpart E and EPA 600/R-93-116, Visual Area Estimation)
NVLAP Lab Code: 101459-0

Forensic Analytical Consulting Svcs
Gary Lowe
21228 Cabot Blvd.

Hayward, CA 94545

Client ID: HAY01
Report Number: B318732
Date Received: 06/03/21
Date Analyzed: 06/08/21
Date Printed: 06/09/21
First Reported: 06/09/21

Job ID/Site: PJ63338; Critical Solutions, Inc.

SGSFL Job ID: HAY01
Total Samples Submitted: 31
Total Samples Analyzed: 23

Date(s) Collected: 06/03/2021

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
BR-01-A	12430484						
Layer: Grey Mortar			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
BR-02-A	12430485						
Layer: Grey Mortar			ND				
Layer: Red Cementitious Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
BR-03-A	12430486						
Layer: Grey Cementitious Material		Chrysotile	Trace				
Total Composite Values of Fibrous Components:		Asbestos (Trace)					
Cellulose (Trace)							
BR-04-A	12430487						
Comment: Sample not analyzed due to prior positive result in series.							
BR-05-A	12430488						
Layer: Grey Cementitious Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
BR-06-A	12430489						
Layer: Grey Cementitious Material			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
BR-07-A	12430490						
Layer: Grey Non-Fibrous Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
BR-08-A	12430491						
Layer: Grey Non-Fibrous Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							

Client Name: Forensic Analytical Consulting Svcs

Report Number: B318732

Date Printed: 06/09/21

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
BR-09-A	12430492						
Layer: Beige Non-Fibrous Material		Chrysotile	Trace				
Total Composite Values of Fibrous Components:		Asbestos (Trace)					
BR-10-A	12430493						
Comment: Sample not analyzed due to prior positive result in series.							
BR-11-A	12430494						
Layer: Grey Non-Fibrous Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (2 %)							
BR-12-A	12430495						
Layer: Grey Non-Fibrous Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (2 %)							
BR-13-A	12430496						
Layer: Black Non-Fibrous Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
BR-14-A	12430497						
Layer: Green Semi-Fibrous Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (10 %)							
BR-15-A	12430498						
Layer: White Semi-Fibrous Material		Chrysotile	3 %	Amosite	15 %		
Total Composite Values of Fibrous Components:		Asbestos (18%)					
Cellulose (Trace)							
BR-16-A	12430499						
Comment: Sample not analyzed due to prior positive result in series.							
BR-17-A	12430500						
Comment: Sample not analyzed due to prior positive result in series.							
BR-18-A	12430501						
Layer: White Semi-Fibrous Material		Chrysotile	3 %	Amosite	10 %		
Total Composite Values of Fibrous Components:		Asbestos (13%)					
Cellulose (Trace)							
BR-19-A	12430502						
Comment: Sample not analyzed due to prior positive result in series.							
BR-20-A	12430503						
Layer: White Plaster			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							

Client Name: Forensic Analytical Consulting Svcs

Report Number: B318732

Date Printed: 06/09/21

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
BR-21-A	12430504						
Layer: White Plaster			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
BR-22-A	12430505						
Layer: White Plaster			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
BR-23-A	12430506						
Layer: White Plaster			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
BR-24-A	12430507						
Layer: White Plaster			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
BR-25-A	12430508						
Layer: Yellow Fibrous Tile			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (2 %) Fibrous Glass (90 %)							
BR-26-A	12430509						
Layer: Yellow Fibrous Material			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace) Fibrous Glass (99 %)							
BR-27-A	12430510						
Layer: Yellow Fibrous Material			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace) Fibrous Glass (99 %)							
BR-28-A	12430511						
Layer: White Semi-Fibrous Material		Chrysotile	3 %	Amosite	10 %		
Total Composite Values of Fibrous Components:		Asbestos (13%)					
Cellulose (Trace)							
BR-29-A	12430512						
Comment: Sample not analyzed due to prior positive result in series.							
BR-30-A	12430513						
Comment: Sample not analyzed due to prior positive result in series.							

Client Name: Forensic Analytical Consulting Svcs

Report Number: B318732

Date Printed: 06/09/21

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
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BR-31-A 12430514

Comment: Sample not analyzed due to prior positive result in series.



Tad Thrower, Laboratory Supervisor, Hayward Laboratory

Note: Limit of Quantification ('LOQ') = 1%. 'Trace' denotes the presence of asbestos below the LOQ. 'ND' = 'None Detected'.

Analytical results and reports are generated by SGS Forensic Laboratories (SGSFL) at the request of and for the exclusive use of the person or entity (client) named on such report. Results, reports or copies of same will not be released by SGSFL to any third party without prior written request from client. This report applies only to the sample(s) tested. Supporting laboratory documentation is available upon request. This report must not be reproduced except in full, unless approved by SGSFL. The client is solely responsible for the use and interpretation of test results and reports requested from SGSFL. SGSFL is not able to assess the degree of hazard resulting from materials analyzed. SGS Forensic Laboratories reserves the right to dispose of all samples after a period of thirty (30) days, according to all state and federal guidelines, unless otherwise specified. All samples were received in acceptable condition unless otherwise noted.

Sampling Data Form / Chain of custody

Client: HAY01
FACS: San Francisco, CA Office
 Critical Solutions, Inc.

Site: Contra Costa College 2600 Mission Bell Drive San Pablo, CA USA

Sampled By: Sevilla / Radzinski
Sample Date: 03 June 2021

Proj #: PJ63338

Turnaround Time:	RUSH	24hr	48hr	Extended (<u>5</u> days)
Analysis:	<input checked="" type="checkbox"/> PLM Standard:	<input type="checkbox"/> PLM w/ Point Count: (<u> </u> 400pt. <u> </u> 1,000 pt.):		
Email results to:	FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com			

prior positive per P. Radzinski - Cym

HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I./Cat II.	Condition	Sample #	Sample Location	Lab result
01	mortar				BR-01-A	Ext. wall, NW corner	
01	mortar				BR-02-A	Ext. wall, N. side	
03	concrete				BR-03-A	pad, @ W. entry threshold	
03	Concrete				BR-04-A	pad, NW quadrant	
04	concrete				BR-05-A	wall footer, @ W. entry	
04	concrete				BR-06-A	wall footer, S. wall, center	
02	sealant				BR-07-A	S. wall, ext. penetration	
02	sealant				BR-08-A	S. wall, ext. penetration	

DW = Drywall, JC = Joint Compound, WT=Wall Texture, VFT = Vinyl Floor Tile, VSF = Vinyl Sheet Flooring, BB = Baseboard, BBM = Baseboard Mastic, CM = Carpet Mastic, ACT = Acoustic Ceiling Tile, ACS = Sprayed-on Acoustic Ceiling Material, FP = Fireproofing, PI = Pipe Insulation, PFI = Pipe fitting insulation, WP = Plaster, CP = Ceiling Plaster, ES = Exterior Stucco

Relinquished by: Radzinski Date and Time: 03 June 2021 / 13:10	Relinquished by: Date and Time:	Relinquished by: Date and Time:
Received by: Date and Time:	Received by: Date and Time:	Received by: Date and Time:



Sampling Data Form / Chain of custody

Client: HAY01
FACS: San Francisco, CA Office
 Critical Solutions, Inc.

Site: Contra Costa College 2600 Mission Bell Drive San Pablo, CA USA

Sampled By: Sevilla/Rodzinski
Sample Date: 03 June 2021
Proj #: PJ63338

Turnaround Time:	RUSH 24hr 48hr Extended (<u>5</u> days)
Analysis:	<input checked="" type="checkbox"/> PLM Standard: <input type="checkbox"/> PLM w/ Point Count: (<input type="checkbox"/> 400pt. <input type="checkbox"/> 1,000 pt.):
Email results to:	FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com

HM

HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I./Cat II.	Condition	Sample #	Sample Location	Lab result
10	sealant,				BR-09-A	E. side, ext., Louvre, S. of center	
10	sealant,				BR-10-A	E. side, ext., Louvre, center	
05	glazing,				BR-11-A	E. side, ext., window, S. of center	
05	glazing,				BR-12-A	E. side, ext., @ E door	
08	gasket				BR-13-A	Ext., N. side, flange, Westerly	
08	gasket				BR-14-A	Ext., N. side, flang, W. of center	
06	TSI				BR-15-A	10" line, straight run, N. pipe W. of center	
06	TSI				BR-16-A	10" line, straight run, N. pipe ~ center	

DW = Drywall, JC = Joint Compound, WT=Wall Texture, VFT = Vinyl Floor Tile, VSF = Vinyl Sheet Flooring, BB = Baseboard, BBM = Baseboard Mastic, CM = Carpet Mastic, ACT = Acoustic Ceiling Tile, ACS = Sprayed-on Acoustic Ceiling Material, FP = Fireproofing, PI = Pipe Insulation, PFI = Pipe fitting insulation, WP = Plaster, CP = Ceiling Plaster, ES = Exterior Stucco

Relinquished by: Rodzinski Date and Time: 03 June 2021 / 0310	Relinquished by: Date and Time:	Relinquished by: Date and Time:
Received by: Date and Time:	Received by: Date and Time:	Received by: Date and Time:



Sampling Data Form / Chain of custody

Client: HAY01
FACS: San Francisco, CA Office
 Critical Solutions, Inc.

Site: Contra Costa College 2600 Mission Bell Drive San Pablo, CA USA

Sampled By: Sewille/Radzinski
Sample Date: 03 June 2021
Proj #: PJ63338

Turnaround Time:	RUSH 24hr 48hr Extended (<u>5</u> days)
Analysis:	<input checked="" type="checkbox"/> PLM Standard: <input type="checkbox"/> PLM w/ Point Count: (<input type="checkbox"/> 400pt. <input type="checkbox"/> 1,000 pt.):
Email results to:	FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com

HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I./Cat II.	Condition	Sample #	Sample Location	Lab result
06	TSI				BR-17-A	10" straight run, S. side, elevated, W. of center	
07	TSI				BR-18-A	10" elbow, elevated, S. side, W. of center	
07	TSI				BR-19-A	10" elbow, NW quadrant	
09	PLASTER WALL				BR-20-A	BOILER ROOM / W. WALL	
09	PLASTER WALL				BR-21-A	BOILER ROOM / SE CORNER / WALL	
09	PLASTER WALL				BR-22-A	BOILER ROOM / NE CORNER / WALL	
09	PLASTER WALL				BR-23-A	BOILER ROOM / NW CORNER / WALL	
09	PLASTER WALL				BR-24-A	BOILER ROOM / SW CORNER / WALL	

DW = Drywall, JC = Joint Compound, WT=Wall Texture, VFT = Vinyl Floor Tile, VSF = Vinyl Sheet Flooring, BB = Baseboard, BBM = Baseboard Mastic, CM = Carpet Mastic, ACT = Acoustic Ceiling Tile, ACS = Sprayed-on Acoustic Ceiling Material, FP = Fireproofing, PI = Pipe Insulation, PFI = Pipe fitting insulation, WP = Plaster, CP = Ceiling Plaster, ES = Exterior Stucco

Relinquished by: Radzinski Date and Time: 03 June 2021 / 1310	Relinquished by: Date and Time:	Relinquished by: Date and Time:
Received by: Date and Time:	Received by: Date and Time:	Received by: Date and Time:



Sampling Data Form / Chain of custody

Client: HAY01
FACS: San Francisco, CA Office
 Critical Solutions, Inc.

Site: Contra Costa College 2600 Mission Bell Drive San Pablo, CA USA

Sampled By: Sevilla/Radzinski
Sample Date: 03 June 2021
Proj #: PJ63338

Turnaround Time:	RUSH 24hr 48hr Extended (<u>5</u> days)
Analysis:	<input checked="" type="checkbox"/> PLM Standard: _____ PLM w/ Point Count: (_____ 400pt. _____ 1,000 pt.):
Email results to:	FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com

HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I./Cat II.	Condition	Sample #	Sample Location	Lab result
14	TS1				BR-25-A	straight run, elevated, S side near center (4")	
14	TS1				BR-26-A	straight run, elevated, S side east of center (4")	
14	TS1				BR-27-A	straight run, elevated, S-side, (4")	
12	TS1				BR-28-A	straight run, 6" verticle	
12	TS1				BR-29-A	straight run, 6" verticle	
12	TS1				BR-30-A	straight run, 6" verticle	
13	TS1				BR-31-A	elbow, 6"	

DW = Drywall, JC = Joint Compound, WT=Wall Texture, VFT = Vinyl Floor Tile, VSF = Vinyl Sheet Flooring, BB = Baseboard, BBM = Baseboard Mastic, CM = Carpet Mastic, ACT = Acoustic Ceiling Tile, ACS = Sprayed-on Acoustic Ceiling Material, FP = Fireproofing, PI = Pipe Insulation, PFI = Pipe fitting insulation, WP = Plaster, CP = Ceiling Plaster, ES = Exterior Stucco

Relinquished by: Radzinski Date and Time: 03 June 2021 / 1310	Relinquished by: Date and Time:	Relinquished by: Date and Time:
Received by: Date and Time:	Received by: Date and Time:	Received by: Date and Time:





Bulk Asbestos Analysis

(EPA Method 40CFR, Part 763, Appendix E to Subpart E and EPA 600/R-93-116, Visual Area Estimation)
NVLAP Lab Code: 101459-0

Forensic Analytical Consulting Svcs
Gary Lowe
21228 Cabot Blvd.

Hayward, CA 94545

Client ID: HAY01
Report Number: B319975
Date Received: 07/02/21
Date Analyzed: 07/06/21
Date Printed: 07/07/21
First Reported: 07/07/21

Job ID/Site: PJ63338; Critical Solutions, Inc. Contra Costa College 2600 Mission Bell Drive
San Pablo CA
Date(s) Collected: 07/02/2021

SGSFL Job ID: HAY01
Total Samples Submitted: 5
Total Samples Analyzed: 5

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
BR-RF-A01	12443240						
Layer: Black Mastic			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (15 %)							
BR-RF-A02	12443241						
Layer: Black Mastic			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (15 %)							
BR-RF-A03	12443242						
Layer: Stones			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace) Fibrous Glass (45 %)							
Comment: Bulk complex sample.							
BR-RF-A04	12443243						
Layer: Stones			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace) Fibrous Glass (45 %)							
Comment: Bulk complex sample.							

Client Name: Forensic Analytical Consulting Svcs

Report Number: B319975

Date Printed: 07/07/21

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
BR-RF-A05	12443244						
Layer: Stones			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)	Fibrous Glass (45 %)						
Comment: Bulk complex sample.							



Tad Thrower, Laboratory Supervisor, Hayward Laboratory

Note: Limit of Quantification ('LOQ') = 1%. 'Trace' denotes the presence of asbestos below the LOQ. 'ND' = 'None Detected'.

Analytical results and reports are generated by SGS Forensic Laboratories (SGSFL) at the request of and for the exclusive use of the person or entity (client) named on such report. Results, reports or copies of same will not be released by SGSFL to any third party without prior written request from client. This report applies only to the sample(s) tested. Supporting laboratory documentation is available upon request. This report must not be reproduced except in full, unless approved by SGSFL. The client is solely responsible for the use and interpretation of test results and reports requested from SGSFL. SGSFL is not able to assess the degree of hazard resulting from materials analyzed. SGS Forensic Laboratories reserves the right to dispose of all samples after a period of thirty (30) days, according to all state and federal guidelines, unless otherwise specified. All samples were received in acceptable condition unless otherwise noted.

Sampling Data Form / Chain of custody

Client: HAY01
FACS: San Francisco, CA Office
 Critical Solutions, Inc.

Site: Contra Costa College 2600 Mission Bell Drive San Pablo, CA USA

Sampled By: J. SEVILLA

Sample Date: 07/02/21

Proj #: PJ63338

Turnaround Time:	RUSH 24hr 48hr Extended (<u>3</u> days)
Analysis:	<input checked="" type="checkbox"/> PLM Standard: <input type="checkbox"/> PLM w/ Point Count: (<u> </u> 400pt. <u> </u> 1,000 pt.):
Email results to:	FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com

HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I./Cat II.	Condition	Sample #	Sample Location	Lab result
01	BLACK PENETRATION ROOF MASTIC	100 LF		G	BR - RF - A01	BOILER ROOM / ROOF / W. AREA	
↓	↓	↓		↓	BR - RF - A02	↓ / E. AREA	
02	ROOF FIELD	3060 SF 250		G	BR - RF - A03	BOILER ROOM / ROOF / W. AREA	
↓	↓	↓		↓	BR - RF - A04	↓ / CENTER	
↓	↓	↓		↓	BR - RF - A05	↓ / E. AREA	

DW = Drywall, JC = Joint Compound, WT=Wall Texture, VFT = Vinyl Floor Tile, VSF = Vinyl Sheet Flooring, BB = Baseboard, BBM = Baseboard Mastic, CM = Carpet Mastic, ACT = Acoustic Ceiling Tile, ACS = Sprayed-on Acoustic Ceiling Material, FP = Fireproofing, PI = Pipe Insulation, PFI = Pipe fitting insulation, WP = Plaster, CP = Ceiling Plaster, ES = Exterior Stucco

Relinquished by: <i>[Signature]</i> Date and Time: 07/02/21	Relinquished by: Date and Time:		Relinquished by: Date and Time:
Received by: Date and Time:	Received by: Date and Time:		Received by: Date and Time:



Bulk Asbestos Analysis

(EPA Method 40CFR, Part 763, Appendix E to Subpart E and EPA 600/R-93-116, Visual Area Estimation)
NVLAP Lab Code: 101459-0

Forensic Analytical Consulting Svcs
Gary Lowe
21228 Cabot Blvd.

Hayward, CA 94545

Client ID: HAY01
Report Number: B318755
Date Received: 06/03/21
Date Analyzed: 06/08/21
Date Printed: 06/09/21
First Reported: 06/09/21

Job ID/Site: PJ63338; Critical Solutions, Inc.

SGSFL Job ID: HAY01
Total Samples Submitted: 114
Total Samples Analyzed: 94

Date(s) Collected: 05/26/2021

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
PSBN-001	12430792						
Layer: White Tile			ND				
Layer: Brown/Green Mastic			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBN-002	12430793						
Layer: White Tile			ND				
Layer: Brown/Green Mastic			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBN-003	12430794						
Layer: Grey Sheet Flooring			ND				
Layer: Tan Mastic			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBN-004	12430795						
Layer: Grey Sheet Flooring			ND				
Layer: Tan Mastic			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBN-005	12430796						
Layer: Brown/Green Mastic			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBN-006	12430797						
Layer: Brown/Green Mastic			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBN-007	12430798						
Layer: Brown Mastic			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							

Client Name: Forensic Analytical Consulting Svcs

Report Number: B318755

Date Printed: 06/09/21

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
PSBN-008	12430799						
Layer: Brown Mastic			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBN-009	12430800						
Layer: Brown/Tan Mastic			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBN-010	12430801						
Layer: Brown/Tan Mastic			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBN-011	12430802						
Layer: Brown Tile			ND				
Layer: Black Mastic		Chrysotile	5 %				
Total Composite Values of Fibrous Components:		Asbestos (Trace)					
Cellulose (Trace)							
PSBN-012	12430803						
Comment: Sample not analyzed due to prior positive result in series.							
PSBN-013	12430804						
Layer: Blue Tile			ND				
Layer: Black Mastic		Chrysotile	5 %				
Total Composite Values of Fibrous Components:		Asbestos (Trace)					
Cellulose (Trace)							
PSBN-014	12430805						
Comment: Sample not analyzed due to prior positive result in series.							
PSBN-015	12430806						
Layer: Beige Tile			ND				
Layer: Black Mastic		Chrysotile	5 %				
Total Composite Values of Fibrous Components:		Asbestos (Trace)					
Cellulose (Trace)							
PSBN-016	12430807						
Comment: Sample not analyzed due to prior positive result in series.							
PSBN-017	12430808						
Layer: Red Tile			ND				
Layer: Black Mastic		Chrysotile	5 %				
Total Composite Values of Fibrous Components:		Asbestos (Trace)					
Cellulose (Trace)							
PSBN-018	12430809						
Comment: Sample not analyzed due to prior positive result in series.							

Client Name: Forensic Analytical Consulting Svcs

Report Number: B318755

Date Printed: 06/09/21

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
PSBN-019	12430810						
Layer: Grey Tile			ND				
Layer: Black Mastic		Chrysotile	5 %				
Total Composite Values of Fibrous Components:		Asbestos (Trace)					
Cellulose (Trace)							
PSBN-020	12430811						
Comment: Sample not analyzed due to prior positive result in series.							
PSBN-021	12430812						
Layer: Grey Ceramic Tile			ND				
Layer: Grey Grout			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBN-022	12430813						
Layer: Grey Ceramic Tile			ND				
Layer: Grey Grout			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBN-023	12430814						
Layer: Beige Mastic			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBN-024	12430815						
Layer: Beige Mastic			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBN-025	12430816						
Layer: White Semi-Fibrous Material			ND				
Layer: Off-White Adhesive			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (50 %)							
PSBN-026	12430817						
Layer: White Semi-Fibrous Material			ND				
Layer: Off-White Adhesive			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (50 %)							
PSBN-027	12430818						
Layer: White Drywall			ND				
Layer: Off-White Joint Compound		Chrysotile	2 %				
Layer: White Tape			ND				
Layer: Off-White Joint Compound		Chrysotile	2 %				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (Trace)					
Cellulose (20 %) Fibrous Glass (10 %)							

Client Name: Forensic Analytical Consulting Svcs

Report Number: B318755

Date Printed: 06/09/21

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
PSBN-028	12430819						
Comment: Sample not analyzed due to prior positive result in series.							
PSBN-029	12430820						
Comment: Sample not analyzed due to prior positive result in series.							
PSBN-030	12430821						
Comment: Sample not analyzed due to prior positive result in series.							
PSBN-031	12430822						
Comment: Sample not analyzed due to prior positive result in series.							
PSBN-032	12430823						
Layer: White Texture							ND
Layer: Paint							ND
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBN-033	12430824						
Layer: Off-White Texture		Chrysotile					2 %
Layer: Paint							ND
Total Composite Values of Fibrous Components:		Asbestos (2%)					
Cellulose (Trace)							
PSBN-034	12430825						
Comment: Sample not analyzed due to prior positive result in series.							
PSBN-035	12430826						
Comment: Sample not analyzed due to prior positive result in series.							
PSBN-036	12430827						
Comment: Sample not analyzed due to prior positive result in series.							
PSBN-037	12430828						
Layer: Off-White Texture		Chrysotile					2 %
Layer: Paint							ND
Total Composite Values of Fibrous Components:		Asbestos (2%)					
Cellulose (Trace)							
PSBN-038	12430829						
Comment: Sample not analyzed due to prior positive result in series.							
PSBN-039	12430830						
Comment: Sample not analyzed due to prior positive result in series.							
PSBN-040	12430831						
Comment: Sample not analyzed due to prior positive result in series.							
PSBN-041	12430832						
Comment: Sample not analyzed due to prior positive result in series.							
PSBN-042	12430833						
Layer: Red Cementitious Material							ND
Layer: Grey Mortar							ND
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							

Client Name: Forensic Analytical Consulting Svcs

Report Number: B318755

Date Printed: 06/09/21

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
PSBN-043	12430834						
Layer: Red Cementitious Material			ND				
Layer: Grey Mortar			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBN-044	12430835						
Layer: Beige Fibrous Material			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (35 %) Fibrous Glass (45 %)							
PSBN-045	12430836						
Layer: Beige Fibrous Material			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (35 %) Fibrous Glass (45 %)							
PSBN-046	12430837						
Layer: Brown Mastic			ND				
Layer: Beige Fibrous Material			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (35 %) Fibrous Glass (45 %)							
PSBN-047	12430838						
Layer: Brown Mastic			ND				
Layer: Beige Fibrous Material			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (35 %) Fibrous Glass (45 %)							
PSBN-048	12430839						
Layer: Grey Non-Fibrous Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBN-049	12430840						
Layer: Grey Non-Fibrous Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBN-050	12430841						
Layer: White Coating		Chrysotile	2 %				
Total Composite Values of Fibrous Components:		Asbestos (2%)					
Cellulose (Trace)							
PSBN-051	12430842						
Comment: Sample not analyzed due to prior positive result in series.							

Client Name: Forensic Analytical Consulting Svcs

Report Number: B318755

Date Printed: 06/09/21

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
PSBN-052	12430843						
Layer: Black Coating			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBN-053	12430844						
Layer: Black Coating			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBN-054	12430845						
Layer: Red Cementitious Material			ND				
Layer: Grey Mortar			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBN-055	12430846						
Layer: Red Cementitious Material			ND				
Layer: Grey Mortar			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBN-056	12430847						
Layer: Black Semi-Fibrous Material		Chrysotile	10 %				
Total Composite Values of Fibrous Components:		Asbestos (10%)					
Cellulose (Trace)							
PSBN-057	12430848						
Comment: Sample not analyzed due to prior positive result in series.							
PSBN-058	12430849						
Layer: Black Non-Fibrous Material		Chrysotile	2 %				
Total Composite Values of Fibrous Components:		Asbestos (2%)					
Cellulose (Trace)							
PSBN-059	12430850						
Comment: Sample not analyzed due to prior positive result in series.							
PSBN-060	12430851						
Layer: Red Semi-Fibrous Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace) Synthetic (10 %)							
PSBN-061	12430852						
Layer: Red Semi-Fibrous Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace) Synthetic (10 %)							
PSBN-062	12430853						
Layer: Black Tape			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (95 %)							

Client Name: Forensic Analytical Consulting Svcs

Report Number: B318755

Date Printed: 06/09/21

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
PSBN-063	12430854						
Layer: Black Tape							ND
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (95 %)							
PSBN-064	12430855						
Layer: Grey Semi-Fibrous Material							ND
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace) Synthetic (25 %)							
PSBN-065	12430856						
Layer: Grey Semi-Fibrous Material							ND
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace) Synthetic (25 %)							
PSBN-066	12430857						
Layer: Tan Fibrous Material							ND
Layer: Silver Foil							ND
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (95 %)							
PSBN-067	12430858						
Layer: Tan Fibrous Material							ND
Layer: Silver Foil							ND
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (95 %)							
PSBN-068	12430859						
Layer: Tan Fibrous Material							ND
Layer: Silver Foil							ND
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (95 %)							
PSBN-069	12430860						
Layer: Black Fibrous Material							ND
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace) Fibrous Glass (99 %)							
PSBN-070	12430861						
Layer: Black Fibrous Material							ND
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace) Fibrous Glass (99 %)							
PSBN-071	12430862						
Layer: Yellow Fibrous Material							ND
Layer: Tan Fibrous Material							ND
Layer: Silver Foil							ND
Layer: Yellow Mastic							ND
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (5 %) Fibrous Glass (80 %)							

Client Name: Forensic Analytical Consulting Svcs

Report Number: B318755

Date Printed: 06/09/21

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
PSBN-072	12430863						
Layer: Yellow Fibrous Material			ND				
Layer: Tan Fibrous Material			ND				
Layer: Silver Foil			ND				
Layer: Yellow Mastic			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (5 %)	Fibrous Glass (80 %)						
PSBN-073	12430864						
Layer: Yellow Fibrous Material			ND				
Layer: Tan Fibrous Material			ND				
Layer: Silver Foil			ND				
Layer: Yellow Mastic			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (5 %)	Fibrous Glass (80 %)						
PSBN-074	12430865						
Layer: Silver Tape			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (50 %)							
PSBN-075	12430866						
Layer: Silver Tape			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (50 %)							
PSBN-076	12430867						
Layer: Stones			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Tan Fibrous Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (10 %)	Fibrous Glass (45 %)						
Comment: Bulk complex sample.							

Client Name: Forensic Analytical Consulting Svcs

Report Number: B318755

Date Printed: 06/09/21

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
PSBN-077	12430868						
Layer: Stones			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Tan Fibrous Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (10 %)	Fibrous Glass (45 %)						
Comment: Bulk complex sample.							
PSBN-078	12430869						
Layer: Stones			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Tan Fibrous Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (10 %)	Fibrous Glass (45 %)						
Comment: Bulk complex sample.							
PSBN-079	12430870						
Layer: Stones			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Tan Fibrous Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (10 %)	Fibrous Glass (45 %)						
Comment: Bulk complex sample.							

Client Name: Forensic Analytical Consulting Svcs

Report Number: B318755

Date Printed: 06/09/21

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
PSBN-080	12430871						
Layer: Stones			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Grey Non-Fibrous Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (10 %)	Fibrous Glass (45 %)						
Comment: Bulk complex sample.							
PSBN-082	12430873						
Layer: Stones			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Tan Fibrous Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (10 %)	Fibrous Glass (45 %)						
Comment: Bulk complex sample.							
PSBN-083	12430874						
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (2 %)	Fibrous Glass (50 %)						
Comment: Bulk complex sample.							

Client Name: Forensic Analytical Consulting Svcs

Report Number: B318755

Date Printed: 06/09/21

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
PSBN-084	12430875						
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (2 %)	Fibrous Glass (50 %)						
Comment: Bulk complex sample.							
PSBN-085	12430876						
Layer: Black Mastic			ND				
Layer: White Coating			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (15 %)	Synthetic (10 %)						
PSBN-086	12430877						
Layer: Black Mastic			ND				
Layer: White Coating			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (15 %)	Synthetic (10 %)						
PSBN-087	12430878						
Layer: Black Mastic			ND				
Layer: White Coating			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (15 %)	Synthetic (10 %)						
PSBN-088	12430879						
Layer: Black Mastic			ND				
Layer: White Stones			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (15 %)	Synthetic (10 %)						
PSBN-089	12430880						
Layer: Black Mastic			ND				
Layer: White Stones			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (15 %)	Synthetic (10 %)						
PSBN-090	12430881						
Layer: Black Mastic			ND				
Layer: White Stones			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (15 %)	Synthetic (10 %)						

Client Name: Forensic Analytical Consulting Svcs

Report Number: B318755

Date Printed: 06/09/21

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
PSBN-091	12430882						
Layer: Grey Mastic			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (15 %)	Synthetic (10 %)						
PSBN-092	12430883						
Layer: Grey Mastic			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (15 %)	Synthetic (10 %)						
PSBN-093	12430884						
Layer: White Non-Fibrous Material			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBN-094	12430885						
Layer: White Non-Fibrous Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBN-095	12430886						
Layer: Black Non-Fibrous Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBN-096	12430887						
Layer: Black Non-Fibrous Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBN-097	12430888						
Layer: White Stones			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (5 %)	Fibrous Glass (45 %)						
Comment: Bulk complex sample.							

Client Name: Forensic Analytical Consulting Svcs

Report Number: B318755

Date Printed: 06/09/21

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
PSBN-098	12430889						
Layer: White Stones			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (5 %) Fibrous Glass (45 %)							
Comment: Bulk complex sample.							
PSBN-099	12430890						
Layer: White Stones			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (5 %) Fibrous Glass (45 %)							
Comment: Bulk complex sample.							
PSBN-100	12430891						
Layer: Grey Cementitious Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBN-101	12430892						
Layer: Grey Cementitious Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBN-102	12430893						
Layer: White Non-Fibrous Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBN-103	12430894						
Layer: White Non-Fibrous Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBN-104	12430895						
Layer: White Cementitious Material			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							

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Report Number: B318755

Date Printed: 06/09/21

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
PSBN-105	12430896						
Layer: White Cementitious Material			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBN-106	12430897						
Layer: White Cementitious Material			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBN-107	12430898						
Layer: White Cementitious Material			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBN-108	12430899						
Layer: White Cementitious Material			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBN-109	12430900						
Layer: Red Cementitious Material			ND				
Layer: Grey Mortar			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBN-110	12430901						
Layer: Red Cementitious Material			ND				
Layer: Grey Mortar			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBN-111	12430902						
Layer: Grey Cementitious Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBN-112	12430903						
Layer: Grey Cementitious Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBN-113	12430904						
Layer: Grey Cementitious Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							

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Report Number: B318755

Date Printed: 06/09/21

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
PSBN-114	12430905						
Layer: Grey Cementitious Material							ND
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							



Tad Thrower, Laboratory Supervisor, Hayward Laboratory

Note: Limit of Quantification ('LOQ') = 1%. 'Trace' denotes the presence of asbestos below the LOQ. 'ND' = 'None Detected'.

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Sampling Data Form / Chain of custody

Client: HAY01
FACS: San Francisco, CA Office
 Critical Solutions, Inc.

Site: Contra Costa College 2600 Mission Bell Drive San Pablo, CA USA

Sampled By: AA
Sample Date: 5/26/21
Proj #: PJ63338

Turnaround Time:	RUSH 24hr 48hr <u>Extended (5 days)</u>	* PRIOR POSITIVE *
Analysis:	<input checked="" type="checkbox"/> PLM Standard: <input type="checkbox"/> PLM w/ Point Count: (<input type="checkbox"/> 400pt. <input type="checkbox"/> 1,000 pt.):	
Email results to:	FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com	

HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I./Cat II.	Condition	Sample #	Sample Location	Lab result
01	12"X12" white w/ blue specks FT over brown mastic and green mastic		N	G	PSBN-001	PSB North / Rm PS-109 / SE area, floor	
↓	↓		↓	↓	↓ -002	↓ / Corridor 2 / NE area, floor	
02	Gray VSF		N	G	-003	/ Corridor 1 / stairs / NW area, floor	
↓	↓		↓	↓	-004	↓ / ↓ / SE area, floor	
03	Blue carpet over brown mastic		N	G	-005	/ Rm PS-113 / NE area, floor	
↓	↓		↓	↓	-006	/ Rm PS-106 / SW area, floor	
04	Red carpet over brown mastic		N	G	-007	/ Rm PS-123 / NW area, floor	
↓	↓		↓	↓	↓ -008	↓ / Rm PS-131 / west center area, floor	

W = Drywall, JC = Joint Compound, WT=Wall Texture, VFT = Vinyl Floor Tile, VSF = Vinyl Sheet Flooring, BB = Baseboard, BBM = Baseboard Mastic, CM = Carpet Mastic, ACT = Acoustic Ceiling Tile, ACS = Sprayed-on Acoustic Ceiling Material, FP = Fireproofing, PI = Pipe Insulation, PFI = Pipe fitting insulation, WP = Plaster, CP = Ceiling Plaster, ES = Exterior Stucco

Relinquished by: Redzinski Date and Time: 03 June 2021 / 1210	Relinquished by: Date and Time:	Relinquished by: Date and Time:
Received by: Date and Time:	Received by: Date and Time:	Received by: Date and Time:

RECEIVED
 JUN 03 2021
 BY: *[Signature]*

Sampling Data Form / Chain of custody

Client: HAY01
FACS: San Francisco, CA Office
 Critical Solutions, Inc.

Site: Contra Costa College 2600 Mission Bell Drive San Pablo, CA USA

Sampled By: AA/JS
Sample Date: 5/26/21
Proj #: PJ63338

Turnaround Time:	RUSH 24hr 48hr <u>Extended (5 days)</u>
Analysis:	<input checked="" type="checkbox"/> PLM Standard: <input type="checkbox"/> PLM w/ Point Count: (<input type="checkbox"/> 400pt. <input type="checkbox"/> 1,000 pt.):
Email results to:	FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com

HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I./Cat II.	Condition	Sample #	Sample Location	Lab result
05	Brown carpet over TAN CARPET MASTIC		N	G	PSBN-009	PSB North / PS RM 117 / E CORNER / FLOOR	
	↓ ↓		N	↓	-010	/ PS RM 118 / NE CORNER / FLOOR	
06	12"x12" Brown w/ white specks FT OVER BLACK MASTIC		N	G	-011	/ PS RM 101 / SE CORNER / FLOOR	
	↓ ↓		↓	↓	-012	/ PS RM 102 / NW CORNER / FLOOR	
07	12"x12" Blue w/ white streaks FT OVER BLACK MASTIC		N	G	-013	/ PS RM 101 / E AREA / FLOOR	
	↓ ↓		↓	↓	-014	/ PS RM 101 / W. AREA / FLOOR	
08	12"x12" Beige w/ gray streaks FT OVER BLACK MASTIC OVER BROWN MASTIC		N	G	-015	/ PS RM 102 / SW AREA / FLOOR	
	↓ ↓		↓	↓	-016	/ PS RM 101 / E AREA / FLOOR	

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Relinquished by: Reedzinski Date and Time: 03 June 2021 / 1310	Relinquished by: Date and Time:	Relinquished by: Date and Time:
Received by: Date and Time:	Received by: Date and Time:	Received by: Date and Time:



Sampling Data Form / Chain of custody

Client: HAY01
FACS: San Francisco, CA Office
 Critical Solutions, Inc.

Site: Contra Costa College 2600 Mission Bell Drive San Pablo, CA USA

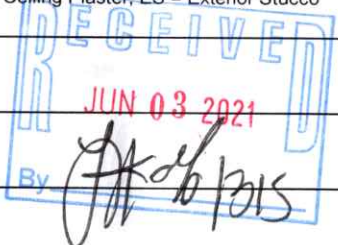
Sampled By: AA & JS
Sample Date: 5/26/21
Proj #: PJ63338

Turnaround Time:	RUSH 24hr 48hr <u>Extended (5 days)</u>
Analysis:	<input checked="" type="checkbox"/> PLM Standard: <input type="checkbox"/> PLM w/ Point Count: (<input type="checkbox"/> 400pt. <input type="checkbox"/> 1,000 pt.):
Email results to:	FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com

HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I./Cat II.	Condition	Sample #	Sample Location	Lab result
09	12"X12" Red FT OVER BLACK MASTIC		N	G	PSBN-017	PSB North / PS RM 102 / W AREA / FLOOR	
↓	↓		↓	↓	-018	↓ / AREA / FLOOR	
10	12"X12" Gray w/ black dots FT OVER BLACK MASTIC		N	G	-019	PS RM 102 / S AREA / FLOOR	
↓	↓		↓	↓	-020	↓ / AREA / FLOOR	
11	2"X2" Gray ceramic FT and grout		N	G	-021	MENS BATHROOM / S AREA / FLOOR	
↓	↓		↓	↓	-022	WOMENS BATHROOM / N AREA / FLOOR	
12	Beige BBM		N	G	-023	CORRIDOR / ADS TO ENTRY 1-031	
↓	↓		↓	↓	-024	↓ / ADS TO ENTRY 1-030	

W = Drywall, JC = Joint Compound, WT=Wall Texture, VFT = Vinyl Floor Tile, VSF = Vinyl Sheet Flooring, BB = Baseboard, BBM = Baseboard Mastic, CM = Carpet Mastic, ACT = Acoustic Ceiling Tile, ACS = Sprayed-on Acoustic Ceiling Material, FP = Fireproofing, PI = Pipe Insulation, PFI = Pipe fitting insulation, WP = Plaster, CP = Ceiling Plaster, ES = Exterior Stucco

Relinquished by: Redzinski Date and Time: 03 June 2021 / 1310	Relinquished by: Date and Time:	Relinquished by: Date and Time:
Received by: Date and Time:	Received by: Date and Time:	Received by: Date and Time:



Sampling Data Form / Chain of custody

Client: HAY01
FACS: San Francisco, CA Office
 Critical Solutions, Inc.

Site: Contra Costa College 2600 Mission Bell Drive San Pablo, CA USA

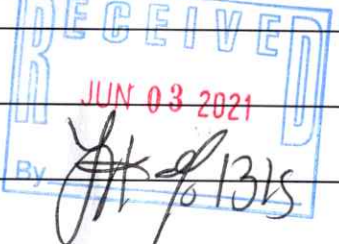
Sampled By: AA & JS
Sample Date: 5/26/21
Proj #: PJ63338

Turnaround Time:	RUSH 24hr 48hr <u>Extended (5 days)</u>
Analysis:	<input checked="" type="checkbox"/> PLM Standard: <input type="checkbox"/> PLM w/ Point Count: (<input type="checkbox"/> 400pt. <input type="checkbox"/> 1,000 pt.):
Email results to:	FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com

HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I./Cat II.	Condition	Sample #	Sample Location	Lab result
13	White wallpaper w/ adhesive		N	G	PSBN-025	PSBN-110 North / Rm PS-107 / NE area, East wall	
↓	↓ ↓		↓	↓	-026	/Corridor 2 / NW area, wall	
14	WB/JC		Y	G	-027	/Rm PS-110 / NW corner, wall	
↓	↓		↓	↓	-028	/Rm PS-107 / SE corner, wall	
↓	↓		↓	↓	-029	/Rm PS-106 / NW corner, wall	
↓	↓		↓	↓	-030	/Rm PS-132 / North corner, wall	
↓	↓		↓	↓	-031	/Corridor 3 / Rm PS-110 / NE corner, wall	
15	Wall texture large splotch		Y	G	-032	/Rm PS-101 / East center area, wall	

W = Drywall, JC = Joint Compound, WT=Wall Texture, VFT = Vinyl Floor Tile, VSF = Vinyl Sheet Flooring, BB = Baseboard, BBM = Baseboard Mastic, CM = Carpet Mastic, ACT = Acoustic Ceiling Tile, ACS = Sprayed-on Acoustic Ceiling Material, FP = Fireproofing, PI = Pipe Insulation, PFI = Pipe fitting insulation, WP = Plaster, CP = Ceiling Plaster, ES = Exterior Stucco

Relinquished by: Redzinski Date and Time: 03 June 2021 / 1310	Relinquished by: Date and Time:	Relinquished by: Date and Time:
Received by: Date and Time:	Received by: Date and Time:	Received by: Date and Time:



Sampling Data Form / Chain of custody

Client: HAY01
FACS: San Francisco, CA Office
 Critical Solutions, Inc.

Site: Contra Costa College 2600 Mission Bell Drive San Pablo, CA USA

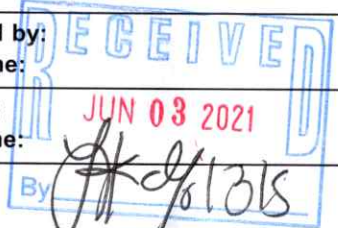
Sampled By: AA & JS
Sample Date: 5/26/21
Proj #: PJ63338

Turnaround Time:	RUSH 24hr 48hr <u>Extended (5 days)</u>
Analysis:	<input checked="" type="checkbox"/> PLM Standard: <input type="checkbox"/> PLM w/ Point Count: (<input type="checkbox"/> 400pt. <input type="checkbox"/> 1,000 pt.):
Email results to:	FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com

HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I./Cat II.	Condition	Sample #	Sample Location	Lab result
15	Wall texture large splotch		Y	G	PSBN-033	PSBN / CORRIDOR / ADJ TO PSBN RM 106 / W WALL	
	↓		↓	↓	-034	↓ / ADJ TO PSBN RM 102 / N. WALL	
	↓		↓	↓	-035	↓ / CORRIDOR / ADJ TO PSBN RM 116 / S WALL	
	↓		↓	↓	-036	↓ / ADJ TO PSBN RM 101 / S. WALL	
16	Wall texture orange peel splotch		Y	G	-037	CORRIDOR / ADJ TO PSBN RM 110 / N. WALL	
	↓		↓	↓	-038	↓ / ADJ TO MENS BATHROOM / S. WALL	
	↓		↓	↓	-039	↓ / ADJ TO WOMENS BATHROOM / S. WALL	
	↓		↓	↓	-040	↓ / PSBN RM 132 / NW CORNER / WALL	

W = Drywall, JC = Joint Compound, WT=Wall Texture, VFT = Vinyl Floor Tile, VSF = Vinyl Sheet Flooring, BB = Baseboard, BBM = Baseboard Mastic, CM = Carpet Mastic, ACT = Acoustic Ceiling Tile, ACS = Sprayed-on Acoustic ceiling Material, FP = Fireproofing, PI = Pipe Insulation, PFI = Pipe fitting insulation, WP = Plaster, CP = Ceiling Plaster, ES = Exterior Stucco

Relinquished by: Redziński	Relinquished by:	Relinquished by:
Date and Time: 03 June 2021 / 12:10	Date and Time:	Date and Time:
Received by:	Received by:	Received by:
Date and Time:	Date and Time:	Date and Time:



Sampling Data Form / Chain of custody

Client: HAY01
FACS: San Francisco, CA Office
 Critical Solutions, Inc.

Site: Contra Costa College 2600 Mission Bell Drive San Pablo, CA USA

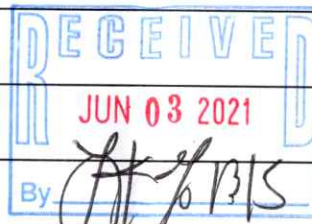
Sampled By: AA & JS
Sample Date: 5/26/21
Proj #: PJ63338

Turnaround Time:	RUSH 24hr 48hr <u>Extended (5 days)</u>
Analysis:	<input checked="" type="checkbox"/> PLM Standard: <input type="checkbox"/> PLM w/ Point Count: (<input type="checkbox"/> 400pt. <input type="checkbox"/> 1,000 pt.):
Email results to:	FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com

HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I./Cat II.	Condition	Sample #	Sample Location	Lab result
16	Wall texture orange peel splotch		Y	G	PSBN-041	PSB North / Rm PS-130 / NE area, wall	
17	Brick and mortar		N	G	-042	/ Corridor 2 / SW area, wall	
↓	↓		↓	↓	-043	/ Corridor 1 / SE area, wall	
18	2'x4' white ACT w/ pinholes		Y	G	-044	/ Central Corridor / NE area, ceiling	
↓	↓		↓	↓	-045	/ Rm PS-101 / NW area, ceiling	
19	12"x12" white ACT w/ fissures over hockey puck mastic		Y	G	-046	/ Rm PS-131 / central area, ceiling	
↓	↓		↓	↓	-047	/ Corridor 1 / SW area, ceiling	
20	Black ^{Gray} window caulking		N	G	↓ -048	↓ / Rm PS-107 / SW area, window	

W = Drywall, JC = Joint Compound, WT = Wall Texture, VFT = Vinyl Floor Tile, VSF = Vinyl Sheet Flooring, BB = Baseboard, BBM = Baseboard Mastic, CM = Carpet Mastic, ACT = Acoustic Ceiling Tile, ACS = Sprayed-on Acoustic Ceiling Material, FP = Fireproofing, PI = Pipe Insulation, PFI = Pipe fitting insulation, WP = Plaster, CP = Ceiling Plaster, ES = Exterior Stucco

Relinquished by: <u>Radzinski</u> Date and Time: <u>03 June 2021 / 12:10</u>	Relinquished by: Date and Time:	Relinquished by: Date and Time:
Received by: Date and Time:	Received by: Date and Time:	Received by: Date and Time:



Sampling Data Form / Chain of custody

Client: HAY01
FACS: San Francisco, CA Office
 Critical Solutions, Inc.

Site: Contra Costa College 2600 Mission Bell Drive San Pablo, CA USA

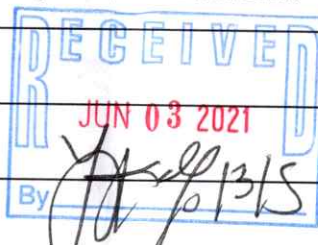
Sampled By: AA & JS
Sample Date: 5/26/21
Proj #: PJ63338

Turnaround Time:	RUSH 24hr 48hr <u>Extended (5 days)</u>
Analysis:	<u>X</u> PLM Standard: _____ PLM w/ Point Count: (_____ 400pt. _____ 1,000 pt.):
Email results to:	FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com

HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I./Cat II.	Condition	Sample #	Sample Location	Lab result
20	Black ^{Gray} window caulking		N	G	PSBN-049	PSB North / Rm PS-107 / NW area, window	
21	White sink undercoat		N	G	-050	/ Rm PS-130 / Under sink	
↓	↓	↓	↓	↓	-051	/ Rm PS-130 /	
22	Black sink under coat		N	G	-052	/ Rm PS-110 /	
↓	↓	↓	↓	↓	-053	/ Rm PS-110 / ↓	
23	3"x6" Red ceramic wall tile w/ grout		N	G	-054	/ Men's Restroom / SE area, South wall	
↓	↓	↓	↓	↓	-055	/ Women's Restroom / NE area, North wall	
24	Black lab table		N	G	↓ -056	↓ / Rm PS-113 / Lab table	

W = Drywall, JC = Joint Compound, WT=Wall Texture, VFT = Vinyl Floor Tile, VSF = Vinyl Sheet Flooring, BB = Baseboard, BBM = Baseboard Mastic, CM = Carpet Mastic, ACT = Acoustic Ceiling Tile, ACS = Sprayed-on Acoustic Ceiling Material, FP = Fireproofing, PI = Pipe Insulation, PFI = Pipe fitting insulation, WP = Plaster, CP = Ceiling Plaster, ES = Exterior Stucco

Relinquished by: <u>Red-zinski</u> Date and Time: <u>03 June 2021 / 12:16</u>	Relinquished by: Date and Time:	Relinquished by: Date and Time:
Received by: Date and Time:	Received by: Date and Time:	Received by: Date and Time:



Sampling Data Form / Chain of custody

Client: HAY01
 FACS: San Francisco, CA Office
 Critical Solutions, Inc.

Site: Contra Costa College 2600 Mission Bell Drive San Pablo, CA USA

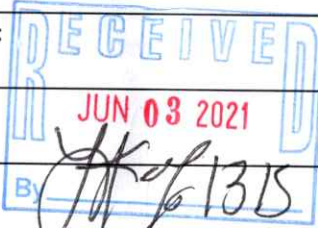
Sampled By: AA & JS
 Sample Date: 5/26/21
 Proj #: PJ63338

Turnaround Time:	RUSH 24hr 48hr <u>Extended (5 days)</u>
Analysis:	<u>X</u> PLM Standard: _____ PLM w/ Point Count: (_____ 400pt. _____ 1,000 pt.):
Email results to:	FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com

HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I./Cat II.	Condition	Sample #	Sample Location	Lab result
24	Black lab table		N	G	PSBN-057	PSB North / Rm PS-106 / Lab table	
25	Black window caulking		N	G	-058	/ Rm PS-109 / SW area, window	
↓	↓ ↓		↓	↓	↓ -059	↓ / Rm PS-109 / NE area, window	
26	Red firestop		N	G	-060	/ Rm PS-132 / South area, Attic wall	
↓	↓ ↓		↓	↓	↓ -061	↓ / Rm PS-110B / East center Attic area, wall	
27	Black duct tape		Y	G	-062	/ Rm PS-132 / South area, on Attic duct	
↓	↓ ↓		↓	↓	↓ -063	↓ / ↓ / SW area, on duct	
28	off-white duct vibration cloth				↓ -064	↓ / Rm PS-130 / West area, on Attic duct	

W = Drywall, JC = Joint Compound, WT=Wall Texture, VFT = Vinyl Floor Tile, VSF = Vinyl Sheet Flooring, BB = Baseboard, BBM = Baseboard Mastic, CM = Carpet Mastic, ACT = Acoustic Ceiling Tile, ACS = Sprayed-on Acoustic Ceiling Material, FP = Fireproofing, PI = Pipe Insulation, PFI = Pipe fitting insulation, WP = Plaster, CP = Ceiling Plaster, ES = Exterior Stucco

Relinquished by: <u>Radzinski</u> Date and Time: <u>03 June 2021/310</u>	Relinquished by: Date and Time:	Relinquished by: Date and Time:
Received by: Date and Time:	Received by: Date and Time:	Received by: Date and Time:



Sampling Data Form / Chain of custody

Client: HAY01
FACS: San Francisco, CA Office
 Critical Solutions, Inc.

Site: Contra Costa College 2600 Mission Bell Drive San Pablo, CA USA

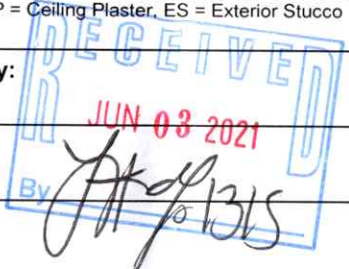
Sampled By: AA & JS
Sample Date: 5/26/21
Proj #: PJ63338

Turnaround Time:	RUSH 24hr 48hr <u>Extended (5 days)</u>
Analysis:	<input checked="" type="checkbox"/> PLM Standard: <input type="checkbox"/> PLM w/ Point Count: (<input type="checkbox"/> 400pt. <input type="checkbox"/> 1,000 pt.):
Email results to:	FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com

HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I./Cat II.	Condition	Sample #	Sample Location	Lab result
28	off-white duct vibration cloth		Y	F	PSBN-065	PSB North / Rm PS-130 Attic / West area, on duct	
29	off-white insulation wrap		Y	F	- 066	/ Rm PS-130 Attic / East area, on pipe	
↓	↓	↓	↓	↓	- 067	/ Corridor 3 / Center area, on pipe	
↓	↓	↓	↓	↓	- 068	/ Rm PS-110B Attic / SE area, on pipe	
30	Black fiberglass panel cloth		Y	G	- 069	/ Rm PS-132 Attic / NW area, on ceiling	
↓	↓	↓	↓	↓	- 070	/ ↓ / NE area, on ceiling	
31	Yellow insulation mastic		Y	G	- 071	/ Rm PS-110B Attic / SE area, on tank	
↓	↓	↓	↓	↓	↓-072	↓ / ↓ / ↓	

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Relinquished by: <u>Radzinski</u> Date and Time: <u>03 June 2021/1310</u>	Relinquished by: Date and Time:	Relinquished by: Date and Time:
Received by: Date and Time:	Received by: Date and Time:	Received by: Date and Time:



Sampling Data Form / Chain of custody

Client: HAY01
FACS: San Francisco, CA Office
 Critical Solutions, Inc.

Site: Contra Costa College 2600 Mission Bell Drive San Pablo, CA USA

Sampled By: AA & JS

Sample Date: 5/26/21

Proj #: PJ63338

Turnaround Time:	RUSH 24hr 48hr <u>Extended (5 days)</u>
Analysis:	<u>X</u> PLM Standard: _____ PLM w/ Point Count: (_____ 400pt. _____ 1,000 pt.):
Email results to:	FACSLabsSF@forensicanalytical.com and gary.love@forensicanalytical.com

HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I./Cat II.	Condition	Sample #	Sample Location	Lab result
31	Yellow insulation mastic		Y	G	PSBN-673	PSB North / RM 15-110B / SE area, on tank Attic	
32	Silver duct tape		N	F	-074	/ / / NE area, on duct	
↓	↓ ↓		↓	↓	↓ -075	↓ / ↓ / ↓	

W = Drywall, JC = Joint Compound, WT=Wall Texture, VFT = Vinyl Floor Tile, VSF = Vinyl Sheet Flooring, BB = Baseboard, BBM = Baseboard Mastic, CM = Carpet Mastic, ACT = Acoustic Ceiling Tile, ACS = Sprayed-on Acoustic Ceiling Material, FP = Fireproofing, PI = Pipe Insulation, PFI = Pipe fitting insulation, WP = Plaster, CP = Ceiling Plaster, ES = Exterior Stucco

Relinquished by: Redzinski Date and Time: 03 June 2021/1310	Relinquished by: JUN 03 2021 Date and Time: [Signature]	Relinquished by: Date and Time:
Received by: Date and Time:	Received by: [Signature] Date and Time:	Received by: Date and Time:

Sampling Data Form / Chain of custody

Client: HAY01
 ACS: San Francisco, CA Office
 Critical Solutions, Inc.

Site: Contra Costa College 2600 Mission Bell Drive San Pablo, CA USA

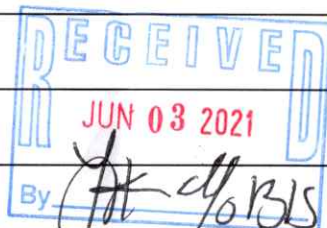
Sampled By: AA & JS
 Sample Date: 5/28/21
 Proj #: PJ63338

Turnaround Time:	RUSH	24hr	48hr	Extended (<u>5</u> days)
Analysis:	<input checked="" type="checkbox"/> PLM Standard:	<input type="checkbox"/> PLM w/ Point Count: (<input type="checkbox"/> 400pt. <input type="checkbox"/> 1,000 pt.):		
Email results to:	FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com			

HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I./Cat II.	Condition	Sample #	Sample Location	Lab result
33	Roof field		N	G	PSBN-076	PSB North Roof / Roof I / North center area, floor	
↓	↓ ↓ ↓		↓	↓	-077	↓ ↓ / Central area, floor	
34	AA Middle Upper roof field		N	G	-078	/ Roof B / Central area, floor	
↓	↓ ↓ ↓		↓	↓	-079	/ Roof J / SW area, floor	
↓	↓ ↓ ↓		↓	↓	-080	/ Roof F / Central area, floor	
<hr/>		VOID	↓	↓	-081	/	AA
33	Roof field		N	G	PSBN-082	/ Roof H / Central area, floor	
35	Upper roof field		N	G	↓ -083	↓ / Roof G / South area, floor	

N = Drywall, JC = Joint Compound, WT=Wall Texture, VFT = Vinyl Floor Tile, VSF = Vinyl Sheet Flooring, BB = Baseboard, BBM = Baseboard Mastic, CM = Carpet Mastic, ACT = Acoustic Ceiling Tile, ACS = Sprayed-on Acoustic Ceiling Material, FP = Fireproofing, PI = Pipe Insulation, PFI = Pipe fitting insulation, WP = Plaster, CP = Ceiling Plaster, ES = Exterior Stucco

Relinquished by: <u>Radzinski</u> Date and Time: <u>03 June 2021/1310</u>	Relinquished by: Date and Time:	Relinquished by: Date and Time:
Received by: Date and Time:	Received by: Date and Time:	Received by: Date and Time:



Sampling Data Form / Chain of custody

Client: HAY01
FACS: San Francisco, CA Office
 Critical Solutions, Inc.

Site: Contra Costa College 2600 Mission Bell Drive San Pablo, CA USA

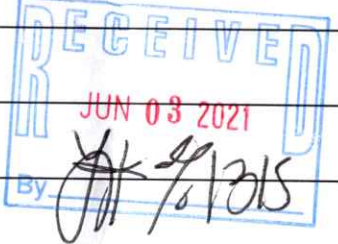
Sampled By: AA & JS
Sample Date: 5/28/21
Proj #: PJ63338

Turnaround Time:	RUSH 24hr 48hr <u>Extended (5 days)</u>
Analysis:	<u>X</u> PLM Standard: _____ PLM w/ Point Count: (_____ 400pt. _____ 1,000 pt.):
Email results to:	FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com

HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I./Cat II.	Condition	Sample #	Sample Location	Lab result
35	Upper roof field		N	G	PSBN-084	PSB North / Roof / Roof G / North area floor	
36	Vent penetration mastic		N	G	-085	/ Roof F / ^{EAST} center area, vent	
↓	↓	↓	↓	↓	-086	/ Roof I / West center area, vent	
↓	↓	↓	↓	↓	-087	/ Roof D / East center area, vent	
37	Pipe penetration mastic		N	G	-088	/ Roof I / SE-Northwest area, pipe	
↓	↓	↓	↓	↓	-089	/ Roof F / SE area, pipe	
↓	↓	↓	↓	↓	-090	/ Roof B / East center area, pipe	
38	Gray mastic		N	G	-091	/ Roof B / Adj to elec unit, floor	

W = Drywall, JC = Joint Compound, WT=Wall Texture, VFT = Vinyl Floor Tile, VSF = Vinyl Sheet Flooring, BB = Baseboard, BBM = Baseboard Mastic, CM = Carpet Mastic, ACT = Acoustic Ceiling Tile, ACS = Sprayed-on Acoustic Ceiling Material, FP = Fireproofing, PI = Pipe Insulation, PFI = Pipe fitting insulation, WP = Plaster, CP = Ceiling Plaster, ES = Exterior Stucco

Relinquished by: Redzinski Date and Time: 03 June 2021/1310	Relinquished by: Date and Time:	Relinquished by: Date and Time:
Received by: Date and Time:	Received by: Date and Time:	Received by: Date and Time:



Sampling Data Form / Chain of custody

Client: HAY01
FACS: San Francisco, CA Office
 Critical Solutions, Inc.

Site: Contra Costa College 2600 Mission Bell Drive San Pablo, CA USA

Sampled By: AA & JS
Sample Date: 6/28/21
Proj #: PJ63338

Turnaround Time:	RUSH 24hr 48hr Extended (<u>5</u> days)
Analysis:	<input checked="" type="checkbox"/> PLM Standard: <input type="checkbox"/> PLM w/ Point Count: (<input type="checkbox"/> 400pt. <input type="checkbox"/> 1,000 pt.):
Email results to:	FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com

HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I./Cat II.	Condition	Sample #	Sample Location	Lab result
38	Gray mastic		N	G	PSBN-092	PSB North / Roof B / Adj to elec unit, floor	
39	White roof caulking		N	G	-093	/Roof J / West wall	
↓	↓ ↓		↓	↓	-094	/Roof F / South wall	
40	Black roof caulking		N	G	-095	/Roof J / SE area, gutter	
↓	↓ ↓		↓	↓	-096	↓ /Roof D / NE area, gutter	
41	Roof flashing		N	G	-097	/Roof H / NW area, South wall	
↓	↓ ↓		↓	↓	-098	↓ /Roof I / NE area, North wall	
↓	↓ ↓		↓	↓	↓ -099	↓ /Roof E / NE area, North wall	

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Relinquished by: Redzinski Date and Time: 03 June 2021 / 1310	Relinquished by: Date and Time: JUN 03 2021	Relinquished by: Date and Time:
Received by: Date and Time:	Received by: [Signature] Date and Time:	Received by: Date and Time:

Sampling Data Form / Chain of custody

Client: HAY01

Site: Contra Costa College 2600 Mission Bell Drive San Pablo, CA USA

Sampled By: AA & JS

FACS: San Francisco, CA Office

Sample Date: 5/28/21

Critical Solutions, Inc.

Proj #: PJ63338

Turnaround Time:	RUSH	24hr	48hr	Extended (<u>5</u> days)
Analysis:	<input checked="" type="checkbox"/> PLM Standard:	<input type="checkbox"/> PLM w/ Point Count: (<input type="checkbox"/> 400pt. <input type="checkbox"/> 1,000 pt.):		
Email results to:	FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com			

HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I./Cat II.	Condition	Sample #	Sample Location	Lab result
42	Concrete steps		N	G	PSBN-100	PSB North / Exterior / Lower Stairwell	
↓	↓ ↓ ↓		↓	↓	-101	/ / / Upper Stairwell	
43	White window caulking		N	G	-102	/ / / NW area, North wall	
↓	↓ ↓ ↓		↓	↓	-103	/ / / West center area, West wall	
44	Stucco wall		N	G	-104	/ / / NW area, Stairwell wall	
↓	↓ ↓ ↓		↓	↓	-105	/ / / North area, North wall	
↓	↓ ↓ ↓		↓	↓	-106	/ / / West center area west wall	
↓	↓ ↓ ↓		↓	↓	↓ -107	↓ / ↓ / West center area west wall	

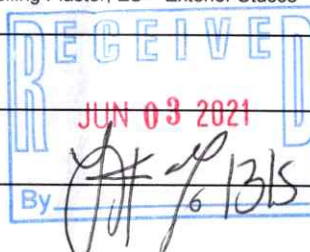
DW = Drywall, JC = Joint Compound, WT=Wall Texture, VFT = Vinyl Floor Tile, VSF = Vinyl Sheet Flooring, BB = Baseboard, BBM = Baseboard Mastic, CM = Carpet Mastic, ACT = Acoustic Ceiling Tile, ACS = Sprayed-on Acoustic Ceiling Material, FP = Fireproofing, PI = Pipe Insulation, PFI = Pipe fitting insulation, WP = Plaster, CP = Ceiling Plaster, ES = Exterior Stucco

Relinquished by: Redzinski
 Date and Time: 03 June 2021 / 1210

Received by:
 Date and Time:

Relinquished by:
 Date and Time:

Received by:
 Date and Time:



Relinquished by:
 Date and Time:

Received by:
 Date and Time:

Sampling Data Form / Chain of custody

Client: HAY01

Site: Contra Costa College 2600 Mission Bell Drive San Pablo, CA USA

Sampled By: AA # JS

FACS: San Francisco, CA Office

Sample Date: 5/28/21

Critical Solutions, Inc.

Proj #: PJ63338

Turnaround Time:	RUSH 24hr 48hr Extended (<u>5</u> days)
Analysis:	<input checked="" type="checkbox"/> PLM Standard: <input type="checkbox"/> PLM w/ Point Count: (<input type="checkbox"/> 400pt. <input type="checkbox"/> 1,000 pt.):
Email results to:	FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com

HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I./Cat II.	Condition	Sample #	Sample Location	Lab result
44	Stucco wall		N	G	PSBN-108	PSB North / Exterior / West area wall	
45	Brick and mortar		N	G	-109	/ NW area, Stairwell wall	
↓	↓ ↓		↓	↓	-110	/ SW area, South wall	✓
46	Concrete floor		N	G	-111	/ NW area, floor adj to entry	
↓	↓ ↓		↓	↓	-112	/ SW area, floor	✓
47	Concrete footing		N	G	-113	/ North area, lower wall	
↓	↓ ↓		↓	↓	-114	/ SW area, West wall	✓

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Relinquished by: <u>Redzinski</u> Date and Time: <u>03 June 2021/1310</u>	Relinquished by: Date and Time:	Relinquished by: Date and Time:
Received by: Date and Time:	Received by: Date and Time:	Received by: Date and Time:



 JUN 03 2021
 By: [Signature]

Bulk Asbestos Analysis

(EPA Method 40CFR, Part 763, Appendix E to Subpart E and EPA 600/R-93-116, Visual Area Estimation)
NVLAP Lab Code: 101459-0

Forensic Analytical Consulting Svcs
Gary Lowe
21228 Cabot Blvd.

Hayward, CA 94545

Client ID: HAY01
Report Number: B318754
Date Received: 06/03/21
Date Analyzed: 06/09/21
Date Printed: 06/10/21
First Reported: 06/10/21

Job ID/Site: PJ63338; Critical Solutions, Inc.

SGSFL Job ID: HAY01
Total Samples Submitted: 111
Total Samples Analyzed: 91

Date(s) Collected: 05/24/2021

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
PSBS-001	12430681						
Layer: Grey Tile			ND				
Layer: Tan Mastic			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBS-002	12430682						
Layer: Grey Tile			ND				
Layer: Tan Mastic			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBS-003	12430683						
Layer: Tan Tile		Chrysotile	5 %				
Layer: Black Mastic		Chrysotile	5 %				
Total Composite Values of Fibrous Components:		Asbestos (5%)					
Cellulose (Trace)							
PSBS-004	12430684	Comment: Sample not analyzed due to prior positive result in series.					
PSBS-005	12430685						
Layer: Beige Tile			ND				
Layer: Black Mastic		Chrysotile	5 %				
Total Composite Values of Fibrous Components:		Asbestos (Trace)					
Cellulose (Trace)							
PSBS-006	12430686	Comment: Sample not analyzed due to prior positive result in series.					
PSBS-007	12430687						
Layer: Dark Grey Tile		Chrysotile	3 %				
Layer: Black Mastic		Chrysotile	5 %				
Total Composite Values of Fibrous Components:		Asbestos (3%)					
Cellulose (Trace)							
PSBS-008	12430688	Comment: Sample not analyzed due to prior positive result in series.					

Client Name: Forensic Analytical Consulting Svcs

Report Number: B318754

Date Printed: 06/10/21

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
PSBS-009	12430689						
Layer: Red Tile			ND				
Layer: Black/Yellow Mastic		Chrysotile	5 %				
Total Composite Values of Fibrous Components:		Asbestos (Trace)					
Cellulose (Trace)							
PSBS-010	12430690						
Comment: Sample not analyzed due to prior positive result in series.							
PSBS-011	12430691						
Layer: Light Brown Tile		Chrysotile	2 %				
Layer: Yellow Mastic			ND				
Total Composite Values of Fibrous Components:		Asbestos (2%)					
Cellulose (Trace)							
PSBS-012	12430692						
Comment: Sample not analyzed due to prior positive result in series.							
PSBS-013	12430693						
Layer: Grey Cementitious Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBS-014	12430694						
Layer: Grey Cementitious Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBS-015	12430695						
Layer: Tan Mastic			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBS-016	12430696						
Layer: Tan Mastic			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBS-017	12430697						
Layer: Brown Mastic			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBS-018	12430698						
Layer: Brown Mastic			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBS-019	12430699						
Layer: White Plaster			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							

Client Name: Forensic Analytical Consulting Svcs

Report Number: B318754

Date Printed: 06/10/21

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
PSBS-020	12430700						
Layer: White Plaster			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBS-021	12430701						
Layer: White Plaster			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBS-022	12430702						
Layer: White Texture			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBS-023	12430703						
Layer: White Texture			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBS-024	12430704						
Layer: White Texture			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBS-025	12430705						
Layer: Beige Fibrous Material			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (35 %) Fibrous Glass (45 %)							
PSBS-026	12430706						
Layer: Beige Fibrous Material			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (35 %) Fibrous Glass (45 %)							
PSBS-027	12430707						
Layer: Tan Fibrous Material			ND				
Layer: Tan Mastic			ND				
Layer: Brown Mastic			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (10 %)							

Client Name: Forensic Analytical Consulting Svcs

Report Number: B318754

Date Printed: 06/10/21

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
PSBS-028	12430708						
Layer: Tan Fibrous Material			ND				
Layer: Tan Mastic			ND				
Layer: Brown Mastic			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (10 %)							
PSBS-029	12430709						
Layer: Yellow Fibrous Material			ND				
Layer: Off-White Semi-Fibrous Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (2 %) Fibrous Glass (90 %)							
PSBS-030	12430710						
Layer: Yellow Fibrous Material			ND				
Layer: Off-White Semi-Fibrous Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (2 %) Fibrous Glass (90 %)							
PSBS-031	12430711						
Layer: Yellow Fibrous Material			ND				
Layer: Off-White Semi-Fibrous Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (2 %) Fibrous Glass (90 %)							
PSBS-032	12430712						
Layer: Yellow Fibrous Material			ND				
Layer: Off-White Semi-Fibrous Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (2 %) Fibrous Glass (90 %)							
PSBS-033	12430713						
Layer: Yellow Fibrous Material			ND				
Layer: Off-White Semi-Fibrous Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (2 %) Fibrous Glass (90 %)							
PSBS-034	12430714						
Layer: Yellow Fibrous Material			ND				
Layer: Off-White Semi-Fibrous Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (2 %) Fibrous Glass (90 %)							
PSBS-035	12430715						
Layer: Yellow Fibrous Material			ND				
Layer: Off-White Semi-Fibrous Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (2 %) Fibrous Glass (90 %)							

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Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
PSBS-036	12430716						
Layer: Grey Fibrous Material			ND				
Layer: Off-White Semi-Fibrous Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (2 %)	Fibrous Glass (90 %)						
PSBS-037	12430717						
Layer: Grey Fibrous Material			ND				
Layer: Off-White Semi-Fibrous Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (2 %)	Fibrous Glass (90 %)						
PSBS-038	12430718						
Layer: Red Cementitious Material			ND				
Layer: Grey Mortar			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBS-039	12430719						
Layer: Red Cementitious Material			ND				
Layer: Grey Mortar			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBS-040	12430720						
Layer: Black Non-Fibrous Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBS-041	12430721						
Layer: Black Non-Fibrous Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBS-042	12430722						
Layer: Black Semi-Fibrous Material		Chrysotile	10 %				
Total Composite Values of Fibrous Components:		Asbestos (10%)					
Cellulose (Trace)							
PSBS-043	12430723						
Comment: Sample not analyzed due to prior positive result in series.							
PSBS-044	12430724						
Layer: Grey Semi-Fibrous Material		Chrysotile	10 %				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (10%)					
Cellulose (Trace)							
PSBS-045	12430725						
Comment: Sample not analyzed due to prior positive result in series.							

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Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
PSBS-046	12430726						
Layer: Black Semi-Fibrous Material			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)	Fibrous Glass (70 %)						
PSBS-047	12430727						
Layer: Black Semi-Fibrous Material			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)	Fibrous Glass (70 %)						
PSBS-048	12430728						
Layer: Red Tape			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)	Synthetic (60 %)						
PSBS-049	12430729						
Layer: Red Tape			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)	Synthetic (60 %)						
PSBS-050	12430730						
Layer: Grey Semi-Fibrous Material		Chrysotile	10 %				
Layer: Black Coating			ND				
Total Composite Values of Fibrous Components:		Asbestos (10%)					
Cellulose (Trace)							
PSBS-051	12430731						
Comment: Sample not analyzed due to prior positive result in series.							
PSBS-052	12430732						
Layer: Black Coating			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBS-053	12430733						
Layer: Black Coating			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBS-054	12430734						
Layer: Red Semi-Fibrous Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)	Synthetic (10 %)						
PSBS-055	12430735						
Layer: Red Semi-Fibrous Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)	Synthetic (10 %)						

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Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
PSBS-056	12430736						
Layer: White Semi-Fibrous Material		Amosite	10 %	Chrysotile	5 %		
Layer: White Woven Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (14%)					
Cellulose (5 %)							
PSBS-057	12430737						
Comment: Sample not analyzed due to prior positive result in series.							
PSBS-058	12430738						
Comment: Sample not analyzed due to prior positive result in series.							
PSBS-059	12430739						
Layer: Grey Semi-Fibrous Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)	Synthetic (50 %)						
PSBS-060	12430740						
Layer: Grey Semi-Fibrous Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)	Synthetic (50 %)						
PSBS-061	12430741						
Layer: White Plaster			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBS-062	12430742						
Layer: White Plaster			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBS-063	12430743						
Layer: White Texture			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBS-064	12430744						
Layer: White Texture			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							

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Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
PSBS-065	12430745						
Layer: White Drywall			ND				
Layer: Off-White Joint Compound		Chrysotile	2 %				
Layer: White Tape			ND				
Layer: Off-White Joint Compound		Chrysotile	2 %				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (Trace)					
Cellulose (20 %)	Fibrous Glass (10 %)						
PSBS-066	12430746						
Comment: Sample not analyzed due to prior positive result in series.							
PSBS-067	12430747						
Comment: Sample not analyzed due to prior positive result in series.							
PSBS-068	12430748						
Layer: Grey Semi-Fibrous Material		Chrysotile	10 %	Crocidolite	5 %		
Total Composite Values of Fibrous Components:		Asbestos (15%)					
Cellulose (Trace)							
PSBS-069	12430749						
Comment: Sample not analyzed due to prior positive result in series.							
PSBS-070	12430750						
Layer: White Semi-Fibrous Material		Amosite	10 %	Chrysotile	2 %		
Total Composite Values of Fibrous Components:		Asbestos (12%)					
Cellulose (Trace)							
PSBS-071	12430751						
Comment: Sample not analyzed due to prior positive result in series.							
PSBS-072	12430752						
Layer: Grey Semi-Fibrous Material		Chrysotile	10 %				
Layer: Black Coating			ND				
Total Composite Values of Fibrous Components:		Asbestos (10%)					
Cellulose (Trace)							
PSBS-073	12430753						
Comment: Sample not analyzed due to prior positive result in series.							
PSBS-074	12430754						
Layer: Black Non-Fibrous Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBS-075	12430755						
Layer: Black Non-Fibrous Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							

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Date Printed: 06/10/21

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
PSBS-076	12430756						
Layer: Silver Tape			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBS-077	12430757						
Layer: Silver Tape			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBS-078	12430758						
Layer: Grey Semi-Fibrous Material		Chrysotile	10 %	Crocidolite	2 %		
Total Composite Values of Fibrous Components:		Asbestos (12%)					
Cellulose (Trace)							
PSBS-079	12430759						
Comment: Sample not analyzed due to prior positive result in series.							
PSBS-080	12430760						
Layer: White Semi-Fibrous Material		Amosite	10 %	Chrysotile	2 %		
Total Composite Values of Fibrous Components:		Asbestos (12%)					
Cellulose (Trace)							
PSBS-081	12430761						
Layer: Grey Cementitious Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBS-082	12430762						
Layer: Grey Cementitious Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBS-083	12430763						
Layer: White Non-Fibrous Material		Chrysotile	Trace				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (Trace)					
Cellulose (Trace)							
PSBS-084	12430764						
Comment: Sample not analyzed due to prior positive result in series.							
PSBS-085	12430765						
Layer: Red Cementitious Material			ND				
Layer: Grey Mortar			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							

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Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
PSBS-086	12430766						
Layer: Red Cementitious Material			ND				
Layer: Grey Mortar			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBS-087	12430767						
Layer: Off-White Semi-Fibrous Material		Chrysotile	5 %				
Total Composite Values of Fibrous Components:		Asbestos (5%)					
Cellulose (Trace)							
PSBS-088	12430768						
Comment: Sample not analyzed due to prior positive result in series.							
PSBS-089	12430769						
Layer: White Non-Fibrous Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBS-090	12430770						
Layer: White Non-Fibrous Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBS-091	12430771						
Layer: Black Semi-Fibrous Material		Chrysotile	5 %				
Total Composite Values of Fibrous Components:		Asbestos (5%)					
Cellulose (Trace)							
PSBS-092	12430772						
Comment: Sample not analyzed due to prior positive result in series.							
PSBS-093	12430773						
Layer: Grey Cementitious Material			ND				
Layer: Brown Cementitious Material			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBS-094	12430774						
Layer: Grey Cementitious Material			ND				
Layer: Brown Cementitious Material			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBS-095	12430775						
Layer: Tan Non-Fibrous Material			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							

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Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
PSBS-096	12430776						
Layer: Tan Non-Fibrous Material			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBS-097	12430777						
Layer: Tan Non-Fibrous Material			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBS-098	12430778						
Layer: Stones			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (5 %) Fibrous Glass (40 %)							
Comment: Bulk complex sample.							
PSBS-099	12430779						
Layer: Stones			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (5 %) Fibrous Glass (40 %)							
Comment: Bulk complex sample.							
PSBS-100	12430780						
Layer: Stones			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (5 %) Fibrous Glass (40 %)							
Comment: Bulk complex sample.							

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Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
PSBS-101	12430781						
Layer: Stones			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt		Chrysotile	40 %				
Layer: Black Tar			ND				
Layer: Black Felt		Chrysotile	40 %				
Total Composite Values of Fibrous Components:		Asbestos (16%)					
Cellulose (20 %) Fibrous Glass (40 %)							
Comment: Bulk complex sample.							
PSBS-102	12430782						
Layer: Stones			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (5 %) Fibrous Glass (40 %)							
Comment: Bulk complex sample.							
PSBS-103	12430783						
Layer: Stones			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (5 %) Fibrous Glass (40 %)							
Comment: Bulk complex sample.							
PSBS-104	12430784						
Layer: Grey Mastic		Chrysotile	10 %				
Total Composite Values of Fibrous Components:		Asbestos (10%)					
Cellulose (Trace)							
PSBS-105	12430785						
Comment: Sample not analyzed due to prior positive result in series.							

Client Name: Forensic Analytical Consulting Svcs

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Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
PSBS-106	12430786						
Layer: Black Mastic							ND
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBS-107	12430787						
Layer: Black Mastic							ND
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBS-108	12430788						
Layer: Grey Semi-Fibrous Material							ND
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace) Fibrous Glass (50 %)							
PSBS-109	12430789						
Layer: Grey Semi-Fibrous Material							ND
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace) Fibrous Glass (50 %)							
PSBS-110	12430790						
Layer: Silver Non-Fibrous Material							ND
Layer: Paint							ND
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBS-111	12430791						
Layer: Silver Non-Fibrous Material							ND
Layer: Paint							ND
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							



Tad Thrower, Laboratory Supervisor, Hayward Laboratory

Note: Limit of Quantification ('LOQ') = 1%. 'Trace' denotes the presence of asbestos below the LOQ. 'ND' = 'None Detected'.

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Sampling Data Form / Chain of custody

Client: HAY01
FACS: San Francisco, CA Office
 Critical Solutions, Inc.

Site: Contra Costa College 2600 Mission Bell Drive San Pablo, CA USA

Sampled By: AA
Sample Date: 5/24/21
Proj #: PJ63338

Turnaround Time:	RUSH	24hr	48hr	Extended (5 days)	<i>*PRIOR POSITIVE*</i>
Analysis:	<input checked="" type="checkbox"/> PLM Standard:		<input type="checkbox"/> PLM w/ Point Count:		(<input type="checkbox"/> 400pt. <input type="checkbox"/> 1,000 pt.):
Email results to:	FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com				

HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I./Cat II.	Condition	Sample #	Sample Location	Lab result
01	12"x12" Gray w/ green FT over tan mastic		N	G	PSBS-001	PSB South/Corridor/SW area, floor	
↓	↓	↓	↓	↓	-002	/ ↓ /NE area, floor	
02	9"x9" Tan w/ brown streaks FT over black mastic		N	G	-003	/Rm PS-1/SE area, floor	
↓	↓	↓	↓	↓	-004	/ ↓ /NW area, floor	
03	12"x12" Beige w/ dark gray and white FT over black mastic		N	G	-005	/Rm PS-1/Central area, floor	
↓	↓	↓	↓	↓	-006	/ ↓ /NE area, floor	
04	12"x12" Dark gray w/ white streaks FT over black mastic		N	G	-007	/Rm PS-5/NE area, floor	
↓	↓	↓	↓	↓	-008	↓/Rm 108/SW area, floor	

DW = Drywall, JC = Joint Compound, WT=Wall Texture, VFT = Vinyl Floor Tile, VSF = Vinyl Sheet Flooring, BB = Baseboard, BBM = Baseboard Mastic, CM = Carpet Mastic, ACT = Acoustic Ceiling Tile, ACS = Sprayed-on Acoustic Ceiling Material, FP = Fireproofing, PI = Pipe Insulation, PFI = Pipe fitting insulation, WP = Plaster, CP = Ceiling Plaster, ES = Exterior Stucco

Relinquished by: Redzinski Date and Time: 03 June 2021/1315	Relinquished by: Date and Time: JUN 03 2021	Relinquished by: Date and Time:
Received by: Date and Time:	Received by: By: [Signature] Date and Time: 6/13/21	Received by: Date and Time:

Sampling Data Form / Chain of custody

Client: HAY01

Site: Contra Costa College 2600 Mission Bell Drive San Pablo, CA USA

Sampled By: AA

FACS: San Francisco, CA Office

Sample Date: 5/24/21

Critical Solutions, Inc.

Proj #: PJ63338

Turnaround Time:	RUSH	24hr	48hr	Extended (5 days)
Analysis:	<input checked="" type="checkbox"/> PLM Standard:	<input type="checkbox"/> PLM w/ Point Count: (<input type="checkbox"/> 400pt. <input type="checkbox"/> 1,000 pt.):		
Email results to:	FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com			

HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I./Cat II.	Condition	Sample #	Sample Location	Lab result
05	12"x12" Red w/ black streaks FT over black and yellow mastic		N	G	PSBS-009	PSB South / Rm PS-5 / SE area, floor	
↓	↓		↓	↓	-010	↓	
06	12"x12" light brown w/ white streaks FT over yellow mastic		N	G	-011	/ Rm PS-5 / SW area, floor	
↓	↓		↓	↓	-012	↓	
07	Concrete floor		N	G	-013	Rm PS-6 / SE area, floor	
↓	↓		↓	↓	-014	/ Rm-PS-19 / NE area, floor	
08	Tan BBM		N	G	-015	/ Corridor / SW area, wall adj to PS-6	
↓	↓		↓	↓	-016	↓ / ↓ / NE area, wall adj to PS-19	

DW = Drywall, JC = Joint Compound, WT=Wall Texture, VFT = Vinyl Floor Tile, VSF = Vinyl Sheet Flooring, BB = Baseboard, BBM = Baseboard Mastic, CM = Carpet Mastic, ACT = Acoustic Ceiling Tile, ACS = Sprayed-on Acoustic Ceiling Material, FP = Fireproofing, PI = Pipe Insulation, PFI = Pipe fitting insulation, WP = Plaster, CP = Ceiling Plaster, ES = Exterior Stucco

Relinquished by: Radzinski
 Date and Time: 03 June 2021/1315

Relinquished by:
 Date and Time:

Relinquished by:
 Date and Time:

Received by:
 Date and Time:

Received by:
 Date and Time:

Received by:
 Date and Time:



Sampling Data Form / Chain of custody

Client: HAY01
ACS: San Francisco, CA Office
 Critical Solutions, Inc.

Site: Contra Costa College 2600 Mission Bell Drive San Pablo, CA USA

Sampled By: AA
Sample Date: 6/24/21
Proj #: PJ63338

Turnaround Time:	RUSH 24hr 48hr Extended (<u>5</u> days)
Analysis:	<input checked="" type="checkbox"/> PLM Standard: <input type="checkbox"/> PLM w/ Point Count: (<input type="checkbox"/> 400pt. <input type="checkbox"/> 1,000 pt.):
Email results to:	FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com

HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I./Cat II.	Condition	Sample #	Sample Location	Lab result
09	Black BBM		N	G	PSBS-017	PSB South / Rm PS-6 / Central area	
↓	↓ ↓		↓	↓	-018	/ Rm PS-14 / ↓	
10	Plaster wall		N	G	-019	/ Rm PS-2 / NE area, wall	
↓	↓ ↓		↓	↓	-020	/ Corridor / Central area, South wall	
↓	↓ ↓		↓	↓	-021	/ Rm PS-14 / East wall, Center area	
11	Wall texture		Y	G	-022	/ Corridor / SW area, West wall	
↓	↓ ↓		↓	↓	-023	/ Rm PS-10 / East wall, Central area	
↓	↓ ↓		↓	↓	-024	↓ / Corridor / NE area, North wall	

W = Drywall, JC = Joint Compound, WT=Wall Texture, VFT = Vinyl Floor Tile, VSF = Vinyl Sheet Flooring, BB = Baseboard, BBM = Baseboard Mastic, CM = Carpet Mastic, ACT = Acoustic Ceiling Tile, ACS = Sprayed-on Acoustic Ceiling Material, FP = Fireproofing, PI = Pipe Insulation, PFI = Pipe fitting insulation, WP = Plaster, CP = Ceiling Plaster, ES = Exterior Stucco

Relinquished by: Date and Time:	<i>Radzinski</i> 03 June 2021 / 1315	Relinquished by: Date and Time:	<i>AA</i> JUL 03 2021	Relinquished by: Date and Time:	
Received by: Date and Time:		Received by: Date and Time:	<i>AA</i> 6/24/21	Received by: Date and Time:	

Sampling Data Form / Chain of custody

Client: HAY01
 FACS: San Francisco, CA Office
 Critical Solutions, Inc.

Site: Contra Costa College 2600 Mission Bell Drive San Pablo, CA USA

Sampled By: AA
 Sample Date: 5/24/21
 Proj #: PJ63338

Turnaround Time:	RUSH	24hr	48hr	Extended (<u>5</u> days)
Analysis:	<input checked="" type="checkbox"/> PLM Standard:	_____ PLM w/ Point Count: (_____ 400pt. _____ 1,000 pt.):		
Email results to:	FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com			

HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I./Cat II.	Condition	Sample #	Sample Location	Lab result
12	2'x4' white ACT w/ pinholes		Y	G	PSBS-025	PSB South / Corridor / SW area, ceiling	
↓	↓ ↓ ↓		↓	↓	-026	↓ ↓ / NE area, ceiling	
13	12"x12" white ACT w/ hockey peck mastic		Y	G	-027	/ Corridor / SW area, ceiling	
↓	↓ ↓ ↓		↓	↓	-028	/ Rm PS-5 / Central area, ceiling	
11	Pipe insulation (run) Pipe wrap		Y	G	-029	/ Corridor	JLA
↓	↓ ↓ ↓		↓	↓	-	/	JLA
↓	↓ ↓ ↓		↓	↓	-	/	JLA
14	yellow pipe insulation wrap		N → AA	G	↓ -029	↓ / Corridor / west area	

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Relinquished by: <u>Redzinski</u> Date and Time: <u>03 June 2021/1315</u>	Relinquished by: Date and Time:	Relinquished by: Date and Time:
Received by: Date and Time:	Received by: Date and Time:	Received by: Date and Time:



Sampling Data Form / Chain of custody

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 FACS: San Francisco, CA Office
 Critical Solutions, Inc.

Site: Contra Costa College 2600 Mission Bell Drive San Pablo, CA USA

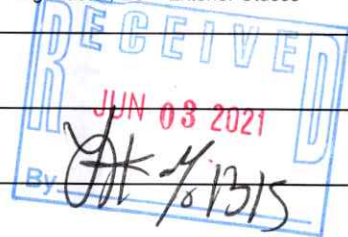
Sampled By: AA
 Sample Date: 5/24/21
 Proj #: PJ63338

Turnaround Time:	RUSH	24hr	48hr	Extended (<u>5</u> days)
Analysis:	<input checked="" type="checkbox"/> PLM Standard:	<input type="checkbox"/> PLM w/ Point Count: (<input type="checkbox"/> 400pt. <input type="checkbox"/> 1,000 pt.):		
Email results to:	FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com			

HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I./Cat II.	Condition	Sample #	Sample Location	Lab result
14	yellow pipe insulation wrap		N Y AA	G	PSBB PSB-030	SD south / Corridor / west Area	
↓	↓		↓	↓	-031	/ Corridor / west Area	
15	off-white pipe insulation wrap		N Y AA	G	-032	/Rm PS-2 / central area	
↓	↓		↓	↓	-033	/Rm PS-2 / south area	
↓	↓		↓	↓	-034	/Rm PS-12 PS-12 / SE area	
16	off white duct insulation wrap Beige duct tape AA		N	G	-035	/Rm PS-2 / Central area	
↓	↓		↓	↓	-036	/Rm PS-12 PS-12 / East central area	
↓	↓		↓	↓	-037	/Rm PS-12 PS-12 / East central area	

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Relinquished by: <u>Redzinski</u> Date and Time: <u>03 June 2021 / 1315</u>	Relinquished by: Date and Time:	Relinquished by: Date and Time:
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Client: HAY01
FACS: San Francisco, CA Office
 Critical Solutions, Inc.

Site: Contra Costa College 2600 Mission Bell Drive San Pablo, CA USA

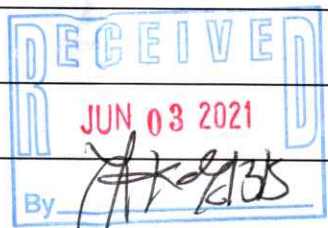
Sampled By: AA
Sample Date: 5/24/21
Proj #: PJ63338

Turnaround Time:	RUSH	24hr	48hr	Extended (<u>5</u> days)
Analysis:	<input checked="" type="checkbox"/> PLM Standard:	<input type="checkbox"/> PLM w/ Point Count: (<input type="checkbox"/> 400pt. <input type="checkbox"/> 1,000 pt.):		
Email results to:	FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com			

HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I/Cat II.	Condition	Sample #	Sample Location	Lab result
17	Brick and mortar		N	G	PSBS-038	PSB South/Corridor/NW area, North wall	
↓	↓	↓	↓	↓	-039	/Rm PS-1 / SE area, East wall	
18	Black lab table		N	G	-040	/Rm PS-5 / Central area, lab table ↓ AA	
↓	↓	↓	↓	↓	-041	/Rm PS-6 / NE area, lab table	
19	Black exhaust system table top		N	G	-042	/Rm PS-6 / West central area	
↓	↓	↓	↓	↓	-043	/Rm PS-14 / East central area	
20	Gray exhaust system transite panel		N	G	-044	/Rm PS-5 / SW area	
↓	↓	↓	↓	↓	-045	↓ /Rm PS-5 / SW area	

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Relinquished by: <u>Radzinski</u> Date and Time: <u>03 June 2021/1320</u>	Relinquished by: Date and Time:	Relinquished by: Date and Time:
Received by: Date and Time:	Received by: Date and Time:	Received by: Date and Time:



Sampling Data Form / Chain of custody

Client: HAY01
 ACS: San Francisco, CA Office
 Critical Solutions, Inc.

Site: Contra Costa College 2600 Mission Bell Drive San Pablo, CA USA

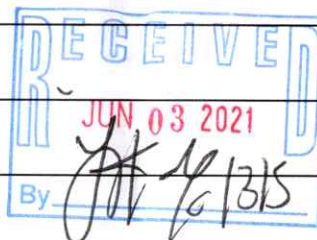
Sampled By: AA
 Sample Date: 5/24/21
 Proj #: PJ63338

Turnaround Time:	RUSH	24hr	48hr	Extended (<u>5</u> days)
Analysis:	<input checked="" type="checkbox"/> PLM Standard:	<input type="checkbox"/> PLM w/ Point Count: (<u> </u> 400pt. <u> </u> 1,000 pt.):		
Email results to:	FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com			

HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I./Cat II.	Condition	Sample #	Sample Location	Lab result
21	Exhaust system duct gasket + AA vibration cloth		N	G	PSBS-046	PSB South/Rm PS-5/SW area	
↓	↓	↓	↓	↓	-047	/	
22	Red duct tape		N	G	-048	/	
↓	↓	↓	↓	↓	-049	/ ↓ / ↓	
23	Black exhaust system transite panel		N	G	-050	/Rm PS-6/ West center area	
↓	↓	↓	↓	↓	-051	/Rm PS-14/ East center area	
24	Black sink undercoat		N	G	-052	/Rm PS-12/ Under sink	
↓	↓	↓	↓	↓	-053	↓ /Rm PS-19/ Under sink	

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Relinquished by: <u>Radezinski</u> Date and Time: <u>03 June 2021/1310</u>	Relinquished by: Date and Time:	Relinquished by: Date and Time:
Received by: Date and Time:	Received by: Date and Time:	Received by: Date and Time:



Sampling Data Form / Chain of custody

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FACS: San Francisco, CA Office
 Critical Solutions, Inc.

Site: Contra Costa College 2600 Mission Bell Drive San Pablo, CA USA

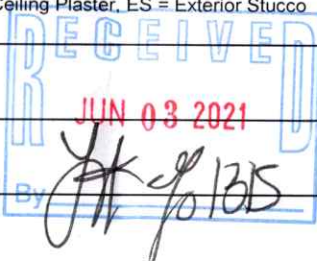
Sampled By: AA
Sample Date: 5/24/21
Proj #: PJ63338

Turnaround Time:	RUSH 24hr 48hr <u>Extended (5 days)</u>
Analysis:	<u>X</u> PLM Standard: _____ PLM w/ Point Count: (_____ 400pt. _____ 1,000 pt.):
Email results to:	FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com

HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I./Cat II.	Condition	Sample #	Sample Location	Lab result
25	Red Firestop		N	G	PSBS-054	PSB South / Rm 108 / South center area, wall	
↓	↓	↓	↓	↓	-055	↓ / North center area, wall	
26	White insulation packing		Y	F	-056	/ Rm PS-12 / SE area	
↓	↓	↓	↓	↓	-057	/ Rm PS-2 / South center area	
↓	↓	↓	↓	↓	-058	/ Rm PS-12 / SW area	
27	Duct joint cloth		N	P	-059	/ Rm PS-12 / East central area	
↓	↓	↓	↓	↓	-060	↓ / West central area	
10	Plaster wall		N	G	↓ 061	↓ / Rm PS-11 / East wall, center area	

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Relinquished by: Radevski Date and Time: 03 June 2021 / 1315	Relinquished by: Date and Time:	Relinquished by: Date and Time:
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Site: Contra Costa College 2600 Mission Bell Drive San Pablo, CA USA

Sampled By: AA
 Sample Date: 5/24/21
 Proj #: PJ63338

Turnaround Time:	RUSH	24hr	48hr	Extended (<u>5</u> days)
Analysis:	<input checked="" type="checkbox"/> PLM Standard:	<input type="checkbox"/> PLM w/ Point Count: (<input type="checkbox"/> 400pt. <input type="checkbox"/> 1,000 pt.):		
Email results to:	FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com			

HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I./Cat II.	Condition	Sample #	Sample Location	Lab result
10	Plaster wall		N	G	PSBS-062	PSB South / Rm PS-15 / NE area, East Wall	
11	Wall texture		Y	G	-063	/ Rm PS-10 / South wall center area	
↓	↓ ↓ ↓		↓	↓	-064	/ Corridor / North wall, center area	
28	WB/JC		Y	G	-065	/ Rm PS-19 / NE area, @ wall/ceiling	
↓	↓ ↓ ↓		↓	↓	-066	/ Rm 108 / SW corner, wall	
↓	↓ ↓ ↓		↓	↓	-067	/ Rm PS-1 / SE area, wall	
29	off white transite pipe fitting		N	G	-068	/ Rm PS-2 / water heater closet, pipe	
↓	↓ ↓ ↓		↓	↓	-069	/ ↓ ↓ ↓	

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Relinquished by: <u>Radzinski</u> Date and Time: <u>03 June 2021/1315</u>	Relinquished by: Date and Time:	Relinquished by: Date and Time:
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Client: HAY01
 ACS: San Francisco, CA Office
 Critical Solutions, Inc.

Site: Contra Costa College 2600 Mission Bell Drive San Pablo, CA USA

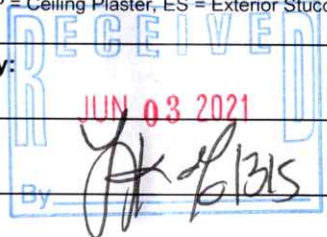
Sampled By: AA
 Sample Date: 5/24/21
 Proj #: PJ63338

Turnaround Time:	RUSH 24hr 48hr <u>Extended (5 days)</u>
Analysis:	<input checked="" type="checkbox"/> PLM Standard: <input type="checkbox"/> PLM w/ Point Count: (<input type="checkbox"/> 400pt. <input type="checkbox"/> 1,000 pt.):
Email results to:	FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com

HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I./Cat II.	Condition	Sample #	Sample Location	Lab result
30	pipe penetration tape and mastic and insulation		N	G	PSBS-070	PSB South / Rm PS-2 / Water closet, pipe penetration	
↓	↓	↓	↓	↓	-071	↓ / ↓	
31	Transite exhaust hood		N	G	-072	/ Rm PS-6 / East center area	
↓	↓	↓	↓	↓	-073	/ Rm PS-14 / West center area	
32	Black lab floor mat		N	G	-074	/ Rm PS-12 / SW area, floor	
↓	↓	↓	↓	↓	-075	/ / ↓	
33	Silver duct tape		N	G	-076	/ / Central area, on duct	
↓	↓	↓	↓	↓	-077	↓ / ↓ / ↓	

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Relinquished by: <i>Rajzinski</i> Date and Time: <i>03 June 2021 / 1315</i>	Relinquished by: Date and Time: <i>JUN 03 2021</i>	Relinquished by: Date and Time:
Received by: Date and Time:	Received by: Date and Time: <i>[Signature]</i>	Received by: Date and Time:



Sampling Data Form / Chain of custody

Client: HAY01
 ACS: San Francisco, CA Office
 Critical Solutions, Inc.

Site: Contra Costa College 2600 Mission Bell Drive San Pablo, CA USA

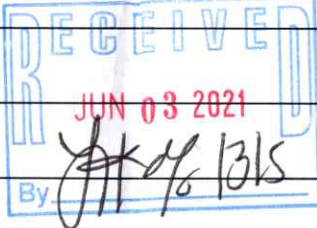
Sampled By: AA & JS
 Sample Date: 5/24/21 - 5/28/21
 Proj #: PJ63338

Turnaround Time:	RUSH	24hr	48hr	Extended (<u>5</u> days)
Analysis:	<input checked="" type="checkbox"/> PLM Standard:	<input type="checkbox"/> PLM w/ Point Count: (<input type="checkbox"/> 400pt. <input type="checkbox"/> 1,000 pt.):		
Email results to:	FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com			

HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I./Cat II.	Condition	Sample #	Sample Location	Lab result
34	White transite pipe		N	G	PSBS-078	PSB South / Rm PS-2 / Water heater closet, pipe	
↓	↓ ↓ ↓		↓	↓	↓ -079	↓ / ↓ / ↓	
30	PIPE penetration tape and insulation		Y	G	PSBS-080	↓ / ↓ / ↓	
35	CONCRETE SLAB		N	G	PSBS-081	PSB South Exterior / SW area, South wall	
↓	↓ ↓ ↓ ↓		↓	↓	↓ -082	↓ / South center area South wall	
36	White window caulking		N	G	↓ -083	↓ / North center area, window	
↓	↓ ↓ ↓		↓	↓	↓ -084	↓ / NW area, window	
37	Brick and mortar		N	G	↓ -085	↓ / NW area, North wall	

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Relinquished by: <u>Radzinski</u> Date and Time: <u>03 June 2021/1915</u>	Relinquished by: Date and Time:	Relinquished by: Date and Time:
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FACS: San Francisco, CA Office
 Critical Solutions, Inc.

Site: Contra Costa College 2600 Mission Bell Drive San Pablo, CA USA

Sampled By: AA #JS
Sample Date: 5/24/21 - 5/28/21
Proj #: PJ63338

Turnaround Time:	RUSH	24hr	48hr	Extended (<u>5</u> days)
Analysis:	<input checked="" type="checkbox"/> PLM Standard:	<input type="checkbox"/> PLM w/ Point Count: (<u> </u> 400pt. <u> </u> 1,000 pt.):		
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HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I./Cat II.	Condition	Sample #	Sample Location	Lab result
37	Brick and mortar		N	G	PSBS-086	BB South Exterior / SE area, East wall	
38	off-white expansion joint		N	G	-087	/ SW corner, wall	
↓	↓ ↓ ↓		↓	↓	-088	/ ↓	
39	White sealant		N	G	-089	South / AA SE area, South wall	
↓	↓ ↓ ↓		↓	↓	-090	/ ↓	
40	Black caulking		N	G	-091	South / AA SE area, South wall	
↓	↓ ↓ ↓		N G A	↓	-092	/ South center area South wall	
41	Concrete wall		N	G	-093	South center area, South wall	

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Relinquished by: <i>Radzinski</i> Date and Time: 03 June 2021 / 1315	Relinquished by: <i>[Signature]</i> Date and Time: JUN 03 2021	Relinquished by: Date and Time:
Received by: Date and Time:	Received by: <i>[Signature]</i> Date and Time: By 6/13/21	Received by: Date and Time:

Sampling Data Form / Chain of custody

Client: HAY01

Site: Contra Costa College 2600 Mission Bell Drive San Pablo, CA USA

Sampled By: AA#JS

FACS: San Francisco, CA Office

Sample Date: 5/24/21 - 5/28/21

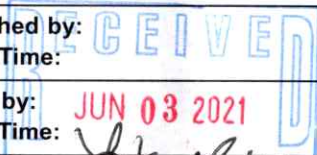
Critical Solutions, Inc.

Proj #: PJ63338

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HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I./Cat II.	Condition	Sample #	Sample Location	Lab result
41	Concrete wall		N	G	PSBS-094	PSB South Exterior / Southeast area East wall	
42	Stucco siding		N	G	- 095	/ SE area, South wall	
↓	↓		↓	↓	- 096	↓ / ↓	
↓	↓		↓	↓	- 097	↓ / ↓	
43	UPPER ROOF FIELD		N	G	- 098	PSB South Roof / SE area, floor	
↓	↓		↓	↓	- 099	↓ / NW area, floor	
44	ROOF FLASHING		N	G	- 100	/ East area, flashing	
↓	↓		↓	↓	- 101	↓ / West area, flashing	

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Turnaround Time:	RUSH	24hr	48hr	Extended (<u>5</u> days)
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Email results to:	FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com			

HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I./Cat II.	Condition	Sample #	Sample Location	Lab result
45	LOWER ROOF FIELD		N	G	PSBS-102	PSB South/SW area, floor Roof	
↓	↓ ↓ ↓ ↓		↓	↓	- 103	NE area, floor	
46	GRAY SEALANT		N	G	- 104	NW area, skylight	
↓	↓ ↓ ↓ ↓		↓	↓	- 105	SE area, skylight	
47	Black ^{PIPE} duct penetration mastic AA		N	G	- 106	North center area, pipe	
↓	↓ ↓ ↓ ↓		↓	↓	- 107	South center area, pipe	
48	Gray vibration cloth		N	G	- 108	SE area, duct	
↓	↓ ↓ ↓ ↓		↓	↓	- 109	NW area, duct	

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Relinquished by: <u>Redzinski</u> Date and Time: <u>03 June 2021/1315</u>	Relinquished by: Date and Time:	Relinquished by: Date and Time:
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 Critical Solutions, Inc.

Site: Contra Costa College 2600 Mission Bell Drive San Pablo, CA USA

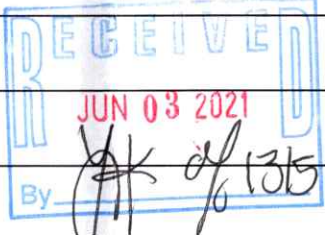
Sampled By: AA & JS
Sample Date: 5/24/21 - 5/28/21
Proj #: PJ63338

Turnaround Time:	RUSH 24hr 48hr <u>Extended (5 days)</u>
Analysis:	<u>X</u> PLM Standard: PLM w/ Point Count: (400pt. 1,000 pt.):
Email results to:	FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com

HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I./Cat II.	Condition	Sample #	Sample Location	Lab result
49	gray duct mastic		N	G	PSBS-110	PSB South / SE area, duct Roof	
↓	↓ ↓		↓	↓	↓ -111	↓ / NW area, duct	

DW = Drywall, JC = Joint Compound, WT=Wall Texture, VFT = Vinyl Floor Tile, VSF = Vinyl Sheet Flooring, BB = Baseboard, BBM = Baseboard Mastic, CM = Carpet Mastic, ACT = Acoustic Ceiling Tile, ACS = Sprayed-on Acoustic Ceiling Material, FP = Fireproofing, PI = Pipe Insulation, PFI = Pipe fitting insulation, WP = Plaster, CP = Ceiling Plaster, ES = Exterior Stucco

Relinquished by: <u>Radzinski</u> Date and Time: <u>03 June 2021 / 1315</u>	Relinquished by: Date and Time:	Relinquished by: Date and Time:
Received by: Date and Time:	Received by: Date and Time:	Received by: Date and Time:



MICRO ANALYTICAL LABORATORIES, INC.

LEAD IN PAINT - FLAME AAS (SW846)



1212
Gary Lowe
Forensic Analytical Consulting
21228 Cabot Boulevard
Hayward, CA 94545

PROJECT:
PROJECT NO. PJ63338
CLIENT'S NO. C26770
CONTRA COSTA COLLEGE
2600 MISSION BELL DRIVE
SAN PABLO, CA
BIOLOGICAL SCIENCE BUILDING

Micro Log In 281875
Total Samples 24
Date Sampled 05/24/2021
Date Received 06/02/2021
Date Analyzed 06/03/2021

Sample ID	Weight Percent	mg/kg (ppm)	RDL
Client: BIO-PB001 Lab: 281875-01 ROOM 18 SOUTHEAST CORNER WALL - WALL ORANGE DRYWALL	0.33 %	3300	0.0370 % 370 mg/kg
Client: BIO-PB003 Lab: 281875-02 ROOM 26 SOUTHEAST COUNTER WALL BEIGE DRYWALL	0.14 %	1400	0.0079 % 79 mg/kg
Client: BIO-PB005 Lab: 281875-03 ROOM 12 SOUTHEAST WALL WALL - OFF-WHITE DRYWALL	< 0.0078 %	< 78	0.0078 % 78 mg/kg
Client: BIO-PB006 Lab: 281875-04 ROOM 43 NORTHEAST CORNER WALL OFF-WHITE PLASTER	0.38 %	3800	0.0370 % 370 mg/kg
Client: BIO-PB007 Lab: 281875-05 ROOM 33 CENTER I BEAM I-BEAM BLACK METAL	0.75 %	7500	0.0790 % 790 mg/kg

Technical Supervisor: 

Long T. Nguyen, Chemistry Supervisor

6/3/2021

Date Reported

Analyst: KG

KG

AIHA-LAP, LLC Accredited Laboratory, ID #101768. Samples are analyzed by Flame Atomic Absorption Spectrometry (AAS) using SOP 23-Paint. This SOP is based on U.S. EPA SW-846 Method 7420 for instrumental analysis, and on ASTM E-1645-16 for nitric acid and hydrogen peroxide digestion. Unless otherwise indicated on this report, all required Quality Control samples have been determined to be in control prior to releasing these analytical results. Unless otherwise stated in this report, all samples were received in acceptable condition for analysis. Note: due to software limitations, the number of reported significant figures does not necessarily reflect the uncertainty of the analysis. If the amount of sample available for analysis is lower than advisable for this method, detection limits and uncertainty will be higher. This report must not be reproduced except in full, without the approval of Micro Analytical Laboratories, Inc., and pertains only to the samples analyzed as received. Unit explanations: mg = milligrams; kg = kilograms; ppm = parts per million. N/A = Not Applicable. RDL = Report Detection Limit.

MICRO ANALYTICAL LABORATORIES, INC.

LEAD IN PAINT - FLAME AAS (SW846)



1212

Gary Lowe

Forensic Analytical Consulting

21228 Cabot Boulevard

Hayward, CA 94545

PROJECT:

PROJECT NO. PJ63338

CLIENT'S NO. C26770

CONTRA COSTA COLLEGE

2600 MISSION BELL DRIVE

SAN PABLO, CA

BIOLOGICAL SCIENCE BUILDING

Micro Log In 281875

Total Samples 24

Date Sampled 05/24/2021

Date Received 06/02/2021

Date Analyzed 06/03/2021

Sample ID	Weight Percent	mg/kg (ppm)	RDL
Client: BIO-PB008 Lab: 281875-06 CORRIDOR ROOM 37 DOOR TRIM WALL TRIM WHITE WOOD	0.035 %	350	0.0075 % 75 mg/kg
Client: BIO-PB009 Lab: 281875-07 CORRIDOR SOUTH END WEST WALL WALL LIGHT BLUE DRYWALL	< 0.0081 %	< 81	0.0081 % 81 mg/kg
Client: BIO-PB010 Lab: 281875-08 CORRIDOR SOUTH END DOOR 7 DOOR BLUE WOOD	0.037 %	370	0.0077 % 77 mg/kg
Client: BIO-PB011 Lab: 281875-09 ROOM 1 SOUTHWEST ADJACENT ROOM TO ELECTRICAL BEAM OFF-WHITE WOOD	0.21 %	2100	0.0320 % 320 mg/kg
Client: BIO-PB012 Lab: 281875-10 ROOM 1 SOUTHEAST WALL WALL BEIGE METAL	0.016 %	160	0.0075 % 75 mg/kg

Technical Supervisor:

Long T. Nguyen, Chemistry Supervisor

6/3/2021

Date Reported

Analyst:

KG

AIHA-LAP, LLC Accredited Laboratory, ID #101768. Samples are analyzed by Flame Atomic Absorption Spectrometry (AAS) using SOP 23-Paint. This SOP is based on U.S. EPA SW-846 Method 7420 for instrumental analysis, and on ASTM E-1645-16 for nitric acid and hydrogen peroxide digestion. Unless otherwise indicated on this report, all required Quality Control samples have been determined to be in control prior to releasing these analytical results. Unless otherwise stated in this report, all samples were received in acceptable condition for analysis. Note: due to software limitations, the number of reported significant figures does not necessarily reflect the uncertainty of the analysis. If the amount of sample available for analysis is lower than advisable for this method, detection limits and uncertainty will be higher. This report must not be reproduced except in full, without the approval of Micro Analytical Laboratories, Inc., and pertains only to the samples analyzed as received. Unit explanations: mg = milligrams; kg = kilograms; ppm = parts per million. N/A = Not Applicable. RDL = Report Detection Limit.

MICRO ANALYTICAL LABORATORIES, INC.

LEAD IN PAINT - FLAME AAS (SW846)



1212
Gary Lowe
Forensic Analytical Consulting
21228 Cabot Boulevard
Hayward, CA 94545

PROJECT:
PROJECT NO. PJ63338
CLIENT'S NO. C26770
CONTRA COSTA COLLEGE
2600 MISSION BELL DRIVE
SAN PABLO, CA
BIOLOGICAL SCIENCE BUILDING

Micro Log In 281875
Total Samples 24
Date Sampled 05/24/2021
Date Received 06/02/2021
Date Analyzed 06/03/2021

Sample ID	Weight Percent	mg/kg (ppm)	RDL
Client: BIO-PB013 Lab: 281875-11 ROOM 3 BOILER ROOM NORTH SIDE GENERATOR BLUE METAL	< 0.0081 %	< 81	0.0081 % 81 mg/kg
Client: BIO-PB014 Lab: 281875-12 ROOM 3 BOILER ROOM SUPPORT POST PIPE YELLOW METAL	0.037 %	370	0.0079 % 79 mg/kg
Client: BIO-PB015 Lab: 281875-13 ROOM 3 BOILER ROOM SOUTH SIDE PIPE VALVE RED METAL	0.022 %	220	0.0076 % 76 mg/kg
Client: BIO-PB016 Lab: 281875-14 ROOM 3 BOILER ROOM FLOOR FLOOR GRAY CONCRETE	< 0.0081 %	< 81	0.0081 % 81 mg/kg
Client: BIO-PB017 Lab: 281875-15 ROOM 3 BOILER ROOM PANEL SOUTH WALL PANEL BLUE WOOD	< 0.0081 %	< 81	0.0081 % 81 mg/kg

Technical Supervisor: _____

Long T. Nguyen, Chemistry Supervisor

6/3/2021

Date Reported

Analyst: _____

KG

AIHA-LAP, LLC Accredited Laboratory ID #101768. Samples are analyzed by Flame Atomic Absorption Spectrometry (AAS) using SOP 23-Paint. This SOP is based on U.S. EPA SW-846 Method 7420 for instrumental analysis, and on ASTM E-1645-16 for nitric acid and hydrogen peroxide digestion. Unless otherwise indicated on this report, all required Quality Control samples have been determined to be in control prior to releasing these analytical results. Unless otherwise stated in this report, all samples were received in acceptable condition for analysis. Note: due to software limitations, the number of reported significant figures does not necessarily reflect the uncertainty of the analysis. If the amount of sample available for analysis is lower than advisable for this method, detection limits and uncertainty will be higher. This report must not be reproduced except in full, without the approval of Micro Analytical Laboratories, Inc., and pertains only to the samples analyzed as received. Unit explanations: mg = milligrams; kg = kilograms; ppm = parts per million. N/A = Not Applicable. RDL = Report Detection Limit.

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LEAD IN PAINT - FLAME AAS (SW846)



1212

Gary Lowe

Forensic Analytical Consulting

21228 Cabot Boulevard

Hayward, CA 94545

PROJECT:

PROJECT NO. PJ63338

CLIENT'S NO. C26770

CONTRA COSTA COLLEGE

2600 MISSION BELL DRIVE

SAN PABLO, CA

BIOLOGICAL SCIENCE BUILDING

Micro Log In 281875

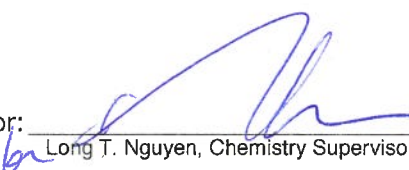
Total Samples 24

Date Sampled 05/24/2021

Date Received 06/02/2021

Date Analyzed 06/03/2021

Sample ID	Lead Concentration		RDL
	Weight Percent	mg/kg (ppm)	
Client: BIO-PB020 Lab: 281875-16 EXT SOUTH SIDE SOFFIT WHITE STUCCO	0.0073 %	73	0.0073 % 73 mg/kg
Client: BIO-PB021 Lab: 281875-17 EXT SOUTHWEST CORNER DUCT CHASE RED METAL	< 0.0079 %	< 79	0.0079 % 79 mg/kg
Client: BIO-PB022 Lab: 281875-18 EXT. WEST SIDE SHADE LOWER WHITE METAL	0.023 %	230	0.0080 % 80 mg/kg
Client: BIO-PB023 Lab: 281875-19 EXT. WEST SIDE WALL LOWER HEADER TRIM BEIGE METAL	2.9 %	29000	0.1900 % 1,900 mg/kg
Client: BIO-PB024 Lab: 281875-20 ROOF SOUTH WEST CORNER PARAPET CAP BROWN METAL	0.063 %	630	0.0076 % 76 mg/kg

Technical Supervisor: 

Long T. Nguyen, Chemistry Supervisor

6/3/2021

Date Reported

Analyst: KG

KG

AIHA-LAP, LLC Accredited Laboratory, ID #101768. Samples are analyzed by Flame Atomic Absorption Spectrometry (AAS) using SOP 23-Paint. This SOP is based on U.S. EPA SW-846 Method 7420 for instrumental analysis, and on ASTM E-1645-16 for nitric acid and hydrogen peroxide digestion. Unless otherwise indicated on this report, all required Quality Control samples have been determined to be in control prior to releasing these analytical results. Unless otherwise stated in this report, all samples were received in acceptable condition for analysis. Note: due to software limitations, the number of reported significant figures does not necessarily reflect the uncertainty of the analysis. If the amount of sample available for analysis is lower than advisable for this method, detection limits and uncertainty will be higher. This report must not be reproduced except in full, without the approval of Micro Analytical Laboratories, Inc., and pertains only to the samples analyzed as received. Unit explanations: mg = milligrams; kg = kilograms; ppm = parts per million. N/A = Not Applicable. RDL = Report Detection Limit.

MICRO ANALYTICAL LABORATORIES, INC.

LEAD IN PAINT - FLAME AAS (SW846)



1212
Gary Lowe
Forensic Analytical Consulting
21228 Cabot Boulevard
Hayward, CA 94545

PROJECT:
PROJECT NO. PJ63338
CLIENT'S NO. C26770
CONTRA COSTA COLLEGE
2600 MISSION BELL DRIVE
SAN PABLO, CA
BIOLOGICAL SCIENCE BUILDING

Micro Log In 281875
Total Samples 24
Date Sampled 05/24/2021
Date Received 06/02/2021
Date Analyzed 06/03/2021

Sample ID	Weight Percent	mg/kg (ppm)	RDL
Client: BIO-PB25 Lab: 281875-21 EXT. WEST SIDE I-BEAM COLUMN BLACK METAL	0.28 %	2800	0.0370 % 370 mg/kg
Client: BIO-PB026 Lab: 281875-22 EXT. WEST SIDE EAVE JOIST WHITE WOOD	0.082 %	820	0.0081 % 81 mg/kg
Client: BIO-PB026 Lab: 281875-23 EXT. SOUTH BOX RED WOOD	< 0.0081 %	< 81	0.0081 % 81 mg/kg
Client: BIO-PB29 Lab: 281875-24 ROOM 29 EXHAUST HOOD WHITE METAL	< 0.0081 %	< 81	0.0081 % 81 mg/kg

Technical Supervisor: 

Long T. Nguyen, Chemistry Supervisor

6/3/2021

Date Reported

Analyst: _____

KG

AIHA-LAP, LLC Accredited Laboratory, ID #101768. Samples are analyzed by Flame Atomic Absorption Spectrometry (AAS) using SOP 23-Paint. This SOP is based on U.S. EPA SW-846 Method 7420 for instrumental analysis, and on ASTM E-1645-16 for nitric acid and hydrogen peroxide digestion. Unless otherwise indicated on this report, all required Quality Control samples have been determined to be in control prior to releasing these analytical results. Unless otherwise stated in this report, all samples were received in acceptable condition for analysis. Note: due to software limitations, the number of reported significant figures does not necessarily reflect the uncertainty of the analysis. If the amount of sample available for analysis is lower than advisable for this method, detection limits and uncertainty will be higher. This report must not be reproduced except in full, without the approval of Micro Analytical Laboratories, Inc., and pertains only to the samples analyzed as received. Unit explanations: mg = milligrams; kg = kilograms; ppm = parts per million. N/A = Not Applicable. RDL = Report Detection Limit.

Paint Chip Sample Request Form

POD2886

Client: HAY01

Site: Contra Costa College 2600 Mission Bell Drive
San Pablo, CA USA

Sampled By: M.A., JA

281875
PAINT

FACS: San Francisco, CA Office

Date: 05/24/21 - 05/28/21

Critical Solutions, Inc. (Biological Science Bldg) Client #: C26770

PM: Gary Bruce Lowe

Contact: Gary Bruce Lowe

Phone: 510-266-4600

Proj #: PJ63338

Turnaround Time: <12hr Same-D 1-Day 2-Day 3-Day 5-Day Other Due Date & Time:

Analysis: Flame AA (Pb) Other

Email results to: FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com \$ malvarez@forensicanalytical.com

Sample #	Sample Location	Component	Color	Substrate	Condition
Bio-Pb001	RM 18, South east corner wall	wall	Orange	Drywall	G
Bio-Pb002	RM 24, South west corner, From 1x1" Ceramic tile counter	Counter top	Gray w/ Black specks	Ceramic tile	G
Bio-Pb003	RM 26, South east corner	wall	Beige	Drywall	G
-Pb004	RM 43, 4" x 4" wall tile	wall	Off-white	Ceramic	G
-Pb005	RM 12, South east wall	wall	Off-white	Drywall	G
-Pb006	RM 43 RM 43 / North East corner	wall	Off-white	plaster	G
-Pb007	RM 33 Center I Beam	I-Beam	Black	Metal	

Substrate: wood, metal, concrete, plaster, drywall, brick

Shipped via: FedEx Airborne UPS US Mail Courier Drop Off Other

Relinquished by: *[Signature]*
Date and Time: 05/31/21
Received by: *[Signature]*
Date and Time: 6/2/21 7:50A

Relinquished by:
Date and Time:
Received by:
Date and Time:

Relinquished by:
Date and Time:
Received by:
Date and Time:

Paint Chip Sample Request Form

PO02886

Page 2

5

Client: HAY01

Site: Contra Costa College 2600 Mission Bell Drive
San Pablo, CA USA

Sampled By: M.A., JA

281875
PAINT

FACS: San Francisco, CA Office

Date: 05/24/21 - 05/28/21

Critical Solutions, Inc.

Client #: C26770

PM: Gary Bruce Lowe

Contact: Gary Bruce Lowe

Phone: 510-266-4600

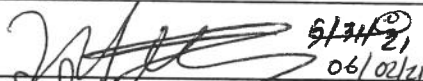
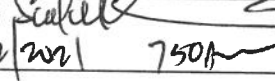
Proj #: PJ63338

Turnaround Time:	<12hr	Same-D	1-Day	2-Day	3-Day	<u>5-Day</u>	Other Due Date & Time:
Analysis:	<u>Flame AA (Pb)</u>	Other					
Email results to:	FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com						

Sample #	Sample Location	Component	Color	Substrate	Condition
Bio-Pb008	Corridor, RM 37 DOOR trim	Door ^{wall} Frame Trim	white	wood	G
Bio-Pb009	Corridor, South end/west wall	wall	light blue	drywall	G
Bio-Pb010	Corridor / South end / Door	Door	blue	wood	G
Bio-Pb011	RM 1 / South west / Adjectit ROOM for electrical	Beam	Off-white	↓	G
Bio-Pb012	RM 1 / South East wall	wall	Beige	drywall	G
Bio-Pb013	RM 3 (Boiler RM) / North Side	Generator	Blue	Metal	G
Bio-Pb014	RM 3 (Boiler RM) / Support Post	PIPE	Yellow	Metal	G

Substrate: wood, metal, concrete, plaster, drywall, brick

Shipped via:	FedEx	Airborne	UPS	US Mail	Courier	Drop Off	Other
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Relinquished by:  Date and Time: 5/24/21 06/02/21	Relinquished by: Date and Time:	Relinquished by: Date and Time:
Received by:  Date and Time: 6/2/21 750A	Received by: Date and Time:	Received by: Date and Time:

Pair Chip Sample Request Form

POD2886

Page 3 3

Client: HAY01

Site: Contra Costa College 2600 Mission Bell Drive
San Pablo, CA USA

Sampled By: M.A. JA

281875
PAINT

FACS: San Francisco, CA Office

Date: 05/24/21 - 05/28/21

Critical Solutions, Inc.

Client #: C26770

PM: Gary Bruce Lowe

Contact: Gary Bruce Lowe

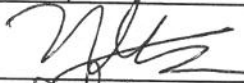
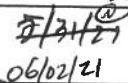


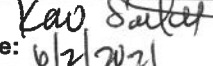



Phone: 510-266-4600

Proj #: PJ63338

Turnaround Time:	<12hr	Same-D	1-Day	2-Day	3-Day	5-Day	Other Due Date & Time:
Analysis:	Flame AA (Pb)	Other					
Email results to:	FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com						

Sample #	Sample Location	Component	Color	Substrate	Condition
B10-Pb015	RM 3 (Boiler RM) / South Side	pipe valve	Red	Metal	G
↓ -Pb016	RM 3 (Boiler RM) Floor	Floor	Gray	Concrete	P
-Pb017	RM 3 (Boiler RM) Panel, South	wall panel	blue	Wood	G
↓ -Pb018	Men's RR, 1"X1" tile	Floor	Gray	Ceramic	G
-Pb019	Roof	Exhaust Fwe	Gray	Metal	G
-Pb020	Ext. South Side	Soffit	White	Stucco	P
↓ -Pb021	Ext. S.W. Corner	DUCT CHASE	Red	Metal	

Substrate: wood, metal, concrete, plaster, drywall, brick

Shipped via:	FedEx	Airborne	UPS	US Mail	Courier	Drop Off	Other
Relinquished by: 	Date and Time: 5/24/21	Relinquished by: 	Date and Time: 06/02/21	Relinquished by: 	Date and Time:	Relinquished by: 	Date and Time:
Received by: 	Date and Time: 6/2/21	Received by: 	Date and Time: 750A	Received by: 	Date and Time:	Received by: 	Date and Time:

Paint Chip Sample Request Form

PO02986

Page 4 5

Client: HAY01

Site: Contra Costa College 2600 Mission Bell Drive
San Pablo, CA USA

Sampled By: M.A., JA

281875
PAINT

FACS: San Francisco, CA Office

Critical Solutions, Inc.

Client #: C26770

Date: 05/24/21 - 05/28/21

PM: Gary Bruce Lowe

Contact: Gary Bruce Lowe

Phone: 510-266-4600

Proj #: PJ63338



Turnaround Time:	<12hr	Same-D	1-Day	2-Day	3-Day	5-Day	Other Due Date & Time:
Analysis:	Flame AA (Pb)	Other					
Email results to:	FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com						

Sample #	Sample Location	Component	Color	Substrate	Condition
Bio - Pb022	Ext. West side	Wall Louver Shade	White	Metal	
-Pb023	Ext. West side	Wall Louver Header Trim	Berge	Metal	P
-Pb024	Roof South west corner	Parapet Cap	Brown	↓	
-Pb025	Ext. / West side	I-BEAM (column)	Black	↓	
-Pb026	Ext. / West side	Eave Joist	White	Wood	
-Pb027	Ext. South	Box	RED	↓	
Pb028	Int. void	Window sill	Brown	↓ JLA	X

18
19
20
21
22
23
X

Substrate: wood, metal, concrete, plaster, drywall, brick

Shipped via: FedEx Airborne UPS US Mail Courier Drop Off Other

Relinquished by:  Date and Time: 5/31/21 06/02/21	Relinquished by: Date and Time:	Relinquished by: Date and Time:
Received by:  Date and Time: 6/2/21	Received by: Date and Time:	Received by: Date and Time:

Paint Chip Sample Request Form

PO02886

Page 5 5

Client: HAY01

Site: Contra Costa College 2600 Mission Bell Drive
San Pablo, CA USA

Sampled By: M.A & J.A.

281875
PAINT

FACS: San Francisco, CA Office

Critical Solutions, Inc.

Client #: C26770

Date: 05-24-21 - 05/28/21

PM: Gary Bruce Lowe

Contact: Gary Bruce Lowe

Phone: 510-266-4600

Proj #: PJ63338

Turnaround Time:

<12hr

Same-D

1-Day

2-Day

3-Day

5-Day

Other Due Date & Time:

Analysis:

Flame AA (Pb)

Other

Email results to:

FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com

Sample #	Sample Location	Component	Color	Substrate	Condition
Bio-Pb029	RM 29	Exhaust Hood	white	metal	G

24

Substrate: wood, metal, concrete, plaster, drywall, brick

Shipped via:

FedEx

Airborne

UPS

US Mail

Courier

Drop Off

Other

Relinquished by:

Date and Time:

[Signature]
5/27/21
06/02/21

Relinquished by:

Date and Time:

Relinquished by:

Date and Time:

Received by:

Date and Time:

[Signature]
6/2/2021 7:50am

Received by:

Date and Time:

Received by:

Date and Time:

MICRO ANALYTICAL LABORATORIES, INC.

EPA SW-846 LEAD-TTLC



1212
Gary Lowe
Forensic Analytical Consulting
21228 Cabot Boulevard
Hayward, CA 94545

PROJECT:

PROJECT NO. PJ63338
CLIENT'S NO. C26770
CONTRA COSTA COLLEGE
2600 MISSION BELL DRIVE
SAN PABLO, CA
BIOLOGICAL SCIENCE BUILDING

Micro Log In **281876**
Total Samples 4
Date Sampled 05/24/2021
Date Received 06/02/2021
Date Analyzed 06/02/2021

Sample ID	Lead Concentration, ppm	RDL, ppm	Comments
Client BIO-PB002 Micro 281876-01 ROOM 24 SOUTH WEST CORNER 1" X 1" CERAMIC TILE FROM COUNTER COUNTER TOP GRAY WITH BLACK SPECKS CERAMIC TILE	< 7.7	7.7	
Client BIO-PB004 Micro 281876-02 ROOM 43 4" X 4" WHITE TILE WALL OFF-WHITE CERAMIC	210	39	
Client BIO-PB18 Micro 281876-03 MEN'S RESTROOM 1" X 1" TILE FLOOR GRAY CERAMIC	< 8.9	8.9	
Client BIO-PB19 Micro 281876-04 ROOF EXHAUST FLUE GRAY METAL	180000	18000	

Technical Supervisor: Long T. Nguyen, Chemistry Supervisor 6/2/2021 Date Reported

Analyst: CZ

AIHA-LAP LLC ELLAP Accredited Laboratory, ID #101768. Samples are analyzed by Flame Atomic Absorption Spectrometry (FLAA) using SOP 23-Soil (in accordance with EPA Methods 3050B for Acid Digestion (SW 846, 3rd edition, 2007) and 7420 for Analysis (SW-846, 3rd edition, 2007)). NOTE: Water samples are analyzed by FLAA in accordance with Method 3111B (Standard Methods for the Examination of Water and Wastewater, 18th edition). Unless otherwise indicated on this report, all required Quality Control samples have been determined to be in control prior to releasing these analytical results. Unless otherwise stated in this report, all samples were received in acceptable condition for analysis. Note: due to software limitations, the number of reported significant figures does not necessarily reflect the uncertainty of the analysis. This report must not be reproduced except in full without the approval of Micro Analytical Laboratories, Inc., and pertains only to the samples analyzed as received. Unit explanations: mg = milligrams; kg = kilograms; ppm = parts per million. TTLC = TOTAL THRESHOLD LIMIT CONCENTRATION. L = liters. RDL = Report Detection Limit. Note: mg / Kg is the same as ppm for solids, and mg/L is the same as ppm for water.

5900 HOLLIS STREET, SUITE M, EMERYVILLE, CALIFORNIA 94608 - (510) 653-0824

Pair Chip Sample Request Form

POD 2886

Page 1

5
281876
TLC

Client: HAY01

Site: Contra Costa College 2600 Mission Bell Drive
San Pablo, CA USA

Sampled By: M.A., JA

FACS: San Francisco, CA Office

Date: 05/24/21 - 05/28/21

Critical Solutions, Inc.

(Biological Science) Bldg

Client #: C26770

PM: Gary Bruce Lowe

Contact: Gary Bruce Lowe

Phone: 510-266-4600

Proj #: PJ63338

Turnaround Time: <12hr Same-D 1-Day 2-Day 3-Day **5-Day** Other Due Date & Time:

Analysis: **Flame AA (Pb)** Other

Email results to: FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com ~~malvarez@forensicanalytical.com~~

Sample #	Sample Location	Component	Color	Substrate	Condition
Bio-Pb001	RM 18, South east corner wall	wall	Orange	Drywall	G
Bio-Pb002	RM 24, South west corner, from 1'x1" ceramic tile counter	Counter top	Gray w/ Black specks	Ceramic tile	G (1)
Bio-Pb003	RM 26, south east corner	wall	Beige	Drywall	G
-Pb004	RM 43, 4" x 4" wall tile	wall	Offwhite	Ceramic	G (2)
-Pb005	RM 12, South east wall	wall	Off-white	Drywall	G
-Pb006	RM 43 / North East corner	wall	Off-white	plaster	G
-Pb007	RM 33 Center I Beam	I-Beam	Black	Metal	

Substrate: wood, metal, concrete, plaster, drywall, brick

Shipped via: FedEx Airborne UPS US Mail Courier Drop Off Other

Relinquished by: [Signature] Date and Time: 05/31/21 06/02/21

Relinquished by: Date and Time:

Relinquished by: Date and Time:

Received by: [Signature] Date and Time: 6/2/21 7:50A

Received by: Date and Time:

Received by: Date and Time:

Pair Chip Sample Request Form

POD2886

Page 3

5

Client: HAY01

Site: Contra Costa College 2600 Mission Bell Drive
San Pablo, CA USA

Sampled By: M.A. JA

281876
TTL

FACS: San Francisco, CA Office

Date: 05/24/21 - 05/28/21

Critical Solutions, Inc.

Client #: C26770

PM: Gary Bruce Lowe

Contact: Gary Bruce Lowe

Phone: 510-266-4600

Proj #: PJ63338

Turnaround Time:	<12hr	Same-D	1-Day	2-Day	3-Day	5-Day	Other Due Date & Time:
Analysis:	Flame AA (Pb)	Other					
Email results to:	FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com						

Sample #	Sample Location	Component	Color	Substrate	Condition
Bio-Pb015	RM 3 (Boiler RM) / South Side	pipe valve	Red	Metal	G
↓ -Pb016	RM 3 (Boiler RM), Floor	Floor	Gray	Concrete	P
-Pb017	RM 3 (Boiler RM) Panel, South	wall panel	blue	Wood	G
↓ -Pb018	Men's RR, 1"X1" tile	Floor	Gray	Ceramic	G (3)
-Pb019	Roof	Exhaust Fwe	Gray	metal	G (4)
-Pb020	Ext. South Side	Soffit	White	Stucco	P
↓ -Pb021	Ext. S.W. Corner	DUCT CHASE	Red	metal	

Substrate: wood, metal, concrete, plaster, drywall, brick

Shipped via:	FedEx	Airborne	UPS	US Mail	Courier	Drop Off	Other
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Relinquished by: <i>[Signature]</i> Date and Time: 5/24/21	Relinquished by: Date and Time:	Relinquished by: Date and Time:
Received by: <i>[Signature]</i> Date and Time: 6/2/21 750A	Received by: Date and Time:	Received by: Date and Time:

Metals Analysis of Paints

(AIHA-LAP, LLC Accreditation, Lab ID #101762)

Forensic Analytical Consulting Svcs
Gary Lowe
21228 Cabot Blvd.

Hayward, CA 94545

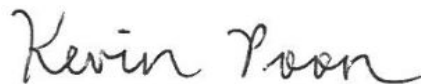
Client ID: HAY01
Report Number: M234202
Date Received: 05/28/21
Date Analyzed: 06/07/21
Date Printed: 06/07/21
First Reported: 06/07/21

Job ID / Site: PJ63338; Critical Solutions, Inc.
Date(s) Collected: 05/28/21

SGSFL Job ID: HAY01
Total Samples Submitted: 2
Total Samples Analyzed: 2

Sample Number	Lab Number	Analyte	Result	Result Units	Reporting Limit*	Method Reference
CSB-PB-101	30889311	Pb	< 0.007	wt%	0.007	EPA 3050B/7000B
CSB-PB-102	30889312	Pb	< 0.007	wt%	0.007	EPA 3050B/7000B

* The Reporting Limit represents the lowest amount of analyte that the laboratory can confidently detect in the sample, and is not a regulatory level. The Units for the Reporting Limit are the same as the Units for the Final Results.



Kevin Poon, Laboratory Analyst, Hayward Laboratory

Analytical results and reports are generated by SGS Forensic Laboratories at the request of and for the exclusive use of the person or entity (client) named on such report. Results, reports or copies of same will not be released by SGS Forensic Laboratories to any third party without prior written request from client. This report applies only to the sample(s) tested. Supporting laboratory documentation is available upon request. This report must not be reproduced except in full, unless approved by SGS Forensic Laboratories. The client is solely responsible for the use and interpretation of test results and reports requested from SGS Forensic Laboratories. SGS Forensic Laboratories is not able to assess the degree of hazard resulting from materials analyzed. SGS Forensic Laboratories reserves the right to dispose of all samples after a period of thirty (30) days, according to all state and federal guidelines, unless otherwise specified. Any modifications that have been made to referenced test methods are documented in SGS Forensic Laboratories' Standard Operating Procedures Manual. Sample results have not been blank corrected. Quality control and sample receipt condition were acceptable unless otherwise noted.

Note* Sampling data used in this report was provided by the client as noted on the associated chain of custody form.

Pair Chip Sample Request Form

Page

Handwritten initials and marks

Client: HAY01

Site: Contra Costa College 2600 Mission Bell Drive
San Pablo, CA USA

Sampled By: Radzinski

FACS: San Francisco, CA Office

Date: 28 May 2021

Critical Solutions, Inc.

Client #: C26770

PM: Gary Bruce Lowe

Contact: Gary Bruce Lowe

Phone: 510-266-4600

Proj #: PJ63338

Turnaround Time:	<input type="checkbox"/> <12hr <input type="checkbox"/> Same-D <input type="checkbox"/> 1-Day <input type="checkbox"/> 2-Day <input type="checkbox"/> 3-Day <input checked="" type="checkbox"/> 5-Day <input type="checkbox"/> Other Due Date & Time:
Analysis:	<input type="checkbox"/> Flame AA (Pb) <input checked="" type="checkbox"/> Other
Email results to:	FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com

Sample #	Sample Location	Component	Color	Substrate	Condition
CSB-Pb-101	ante-chamber, Flammables door	door	grey	metal	G
CSB-Pb-102	ante-chamber, wall between Hazards and Flammable storage doors	wall	beige	wallboard	G
 					
 					
 					
 					
 					

Substrate: wood, metal, concrete, plaster, drywall, brick

Shipped via:	<input type="checkbox"/> FedEx <input type="checkbox"/> Airborne <input type="checkbox"/> UPS <input type="checkbox"/> US Mail <input checked="" type="checkbox"/> Courier <input type="checkbox"/> Drop Off <input type="checkbox"/> Other	
Relinquished by: Radzinski Date and Time: 28 May 2021 / 1522	Relinquished by: Date and Time:	Relinquished by: Date and Time:
Received by: Date and Time:	Received by: Date and Time:	Received by: Date and Time:

RECEIVED
 MAY 28 2021
 By: *[Signature]*

Metals Analysis of Paints

(AIHA-LAP, LLC Accreditation, Lab ID #101762)

Forensic Analytical Consulting Svcs
Gary Lowe
21228 Cabot Blvd.

Hayward, CA 94545

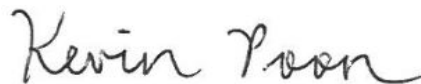
Client ID: HAY01
Report Number: M234203
Date Received: 05/28/21
Date Analyzed: 06/07/21
Date Printed: 06/07/21
First Reported: 06/07/21

Job ID / Site: PJ63338; Critical Solutions, Inc.
Date(s) Collected: 05/28/21

SGSFL Job ID: HAY01
Total Samples Submitted: 1
Total Samples Analyzed: 1

Sample Number	Lab Number	Analyte	Result	Result Units	Reporting Limit*	Method Reference
CE-PB-101	30889313	Pb	0.88	wt%	0.07	EPA 3050B/7000B

* The Reporting Limit represents the lowest amount of analyte that the laboratory can confidently detect in the sample, and is not a regulatory level. The Units for the Reporting Limit are the same as the Units for the Final Results.



Kevin Poon, Laboratory Analyst, Hayward Laboratory

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Note* Sampling data used in this report was provided by the client as noted on the associated chain of custody form.

Pair Chip Sample Request Form

Client: HAY01

Site: Contra Costa College 2600 Mission Bell Drive
San Pablo, CA USA

Sampled By: Redzinski

FACS: San Francisco, CA Office

Date: 28 May 2021

Critical Solutions, Inc.

Client #: C26770

PM: Gary Bruce Lowe

Contact: Gary Bruce Lowe

Phone: 510-266-4600

Proj #: PJ63338

Turnaround Time:	<12hr	Same-D	1-Day	2-Day	3-Day	5-Day	Other Due Date & Time:
Analysis:	Flame AA (Pb)	Other					
Email results to:	FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com						

Sample #	Sample Location	Component	Color	Substrate	Condition
CE-Pb-10)	Chiller component near entry	chiller component, near entry	grey	metal	good
/					

Substrate: wood, metal, concrete, plaster, drywall, brick

Shipped via:	FedEx	Airborne	UPS	US Mail	Courier	Drop Off	Other
Relinquished by: Redzinski	Relinquished by:			Relinquished by:			
Date and Time: 28 May 2021 / 1515	Date and Time:			Date and Time:			
Received by:	Received by:			Received by:			
Date and Time:	Date and Time:			Date and Time:			



Metals Analysis of Paints

(AIHA-LAP, LLC Accreditation, Lab ID #101762)

Forensic Analytical Consulting Svcs
Gary Lowe
21228 Cabot Blvd.

Hayward, CA 94545

Client ID: HAY01
Report Number: M234278
Date Received: 06/03/21
Date Analyzed: 06/10/21
Date Printed: 06/10/21
First Reported: 06/10/21

Job ID / Site: PJ63338; Critical Solutions, Inc.
Date(s) Collected: 5/25/21

SGSFL Job ID: HAY01
Total Samples Submitted: 27
Total Samples Analyzed: 27

Sample Number	Lab Number	Analyte	Result	Result Units	Reporting Limit*	Method Reference
PSBS-PB01	30889501	Pb	< 0.006	wt%	0.006	EPA 3050B/7000B
PSBS-PB02	30889502	Pb	0.96	wt%	0.06	EPA 3050B/7000B
PSBS-PB03	30889503	Pb	0.10	wt%	0.007	EPA 3050B/7000B
PSBS-PB04	30889504	Pb	1.9	wt%	0.2	EPA 3050B/7000B
PSBS-PB05	30889505	Pb	0.11	wt%	0.006	EPA 3050B/7000B
PSBS-PB06	30889506	Pb	0.38	wt%	0.04	EPA 3050B/7000B
PSBS-PB07	30889507	Pb	0.32	wt%	0.02	EPA 3050B/7000B
PSBS-PB08	30889508	Pb	0.26	wt%	0.02	EPA 3050B/7000B
PSBS-PB09	30889509	Pb	0.012	wt%	0.007	EPA 3050B/7000B
PSBS-PB10	30889510	Pb	0.029	wt%	0.006	EPA 3050B/7000B
PSBS-PB11	30889511	Pb	0.039	wt%	0.006	EPA 3050B/7000B
PSBS-PB12	30889512	Pb	0.32	wt%	0.02	EPA 3050B/7000B
PSBS-PB13	30889513	Pb	5.5	wt%	0.4	EPA 3050B/7000B
PSBS-PB14	30889514	Pb	0.090	wt%	0.006	EPA 3050B/7000B
PSBS-PB15	30889515	Pb	0.57	wt%	0.03	EPA 3050B/7000B
PSBS-PB16	30889516	Pb	0.97	wt%	0.06	EPA 3050B/7000B
PSBS-PB17	30889517	Pb	0.29	wt%	0.02	EPA 3050B/7000B
PSBS-PB18	30889518	Pb	0.013	wt%	0.006	EPA 3050B/7000B
PSBS-PB18	30889519	Pb	0.34	wt%	0.02	EPA 3050B/7000B
PSBS-PB20	30889520	Pb	0.11	wt%	0.006	EPA 3050B/7000B
PSBS-PB21	30889521	Pb	8.5	wt%	0.6	EPA 3050B/7000B
PSBS-PB22	30889522	Pb	0.47	wt%	0.06	EPA 3050B/7000B
PSBS-PB23	30889523	Pb	0.020	wt%	0.006	EPA 3050B/7000B
PSBS-PB24	30889524	Pb	3.2	wt%	0.3	EPA 3050B/7000B
PSBS-PB25	30889525	Pb	0.19	wt%	0.02	EPA 3050B/7000B
PSBS-PB26	30889526	Pb	2.5	wt%	0.2	EPA 3050B/7000B
PSBS-PB27	30889527	Pb	0.008	wt%	0.006	EPA 3050B/7000B

Metals Analysis of Paints

(AIHA-LAP, LLC Accreditation, Lab ID #101762)

Forensic Analytical Consulting Svcs
Gary Lowe
21228 Cabot Blvd.

Hayward, CA 94545

Client ID: HAY01
Report Number: M234278
Date Received: 06/03/21
Date Analyzed: 06/10/21
Date Printed: 06/10/21
First Reported: 06/10/21

Job ID / Site: PJ63338; Critical Solutions, Inc.
Date(s) Collected: 5/25/21

SGSFL Job ID: HAY01
Total Samples Submitted: 27
Total Samples Analyzed: 27

Sample Number	Lab Number	Analyte	Result	Result Units	Reporting Limit*	Method Reference
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* The Reporting Limit represents the lowest amount of analyte that the laboratory can confidently detect in the sample, and is not a regulatory level. The Units for the Reporting Limit are the same as the Units for the Final Results.



Kevin Poon, Laboratory Analyst, Hayward Laboratory

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Note* Sampling data used in this report was provided by the client as noted on the associated chain of custody form.

Pain Chip Sample Request Form

Client: HAY01

Site: Contra Costa College 2600 Mission Bell Drive
San Pablo, CA USA

Sampled By: AA & JA

FACS: San Francisco, CA Office

Date: 5/25/21

Critical Solutions, Inc.

Client #: C26770

PM: Gary Bruce Lowe

Contact: Gary Bruce Lowe

Phone: 510-266-4600

Proj #: PJ63338

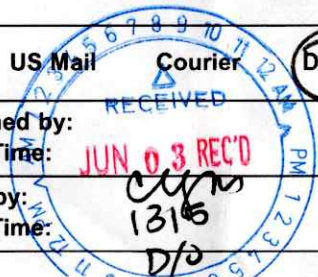
Turnaround Time:	<12hr	Same-D	1-Day	2-Day	3-Day	5-Day	Other Due Date & Time:
Analysis:	Flame AA (Pb)		Other				
Email results to:	FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com						

Sample #	PSB South	Sample Location	Component	Color	Substrate	Condition
PSBS - Pb001	PSB South	Corridor / South wall / North wall	JLA Plaster wall	Baby Blue	Plaster	I
Pb002		RM PS-8 / West wall	Wall	Light orange	Plaster	I
- Pb003		RM PS-17 / West wall	Wall	off white	Plaster	G
- Pb004		RM PS-12 / South wall	Wall	Orange	Plaster	G
- Pb005		RM PS-19 / North wall	Wall	Dark Blue	Drywall	G
- Pb006		RM PS-5 / North wall	Door Wall Frame	Brown	Metal	I
✓ - Pb007		RM PS-5 / North	Door Frame	Baby Blue	metal	I

Substrate: wood, metal, concrete, plaster, drywall, brick

Shipped via:	FedEx	Airborne	UPS	US Mail	Courier	Drop Off	Other
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Relinquished by: Radziński Date and Time: 23 June 2021 / 1310	Relinquished by: Date and Time: JUN 03 REC'D 1316 D/O	Relinquished by: Date and Time:
Received by: Date and Time:	Received by: Date and Time:	Received by: Date and Time:



Pain Chip Sample Request Form

Client: HAY01

Site: Contra Costa College 2600 Mission Bell Drive
San Pablo, CA USA

Sampled By: AA & JA

FACS: San Francisco, CA Office

Date: 5/25/21

Critical Solutions, Inc.

Client #: C26770

PM: Gary Bruce Lowe

Contact: Gary Bruce Lowe

Phone: 510-266-4600

Proj #: PJ63338

Turnaround Time:

<12hr Same-D 1-Day 2-Day 3-Day **5-Day** Other Due Date & Time:

Analysis:

Flame AA (Pb) Other

Email results to:

FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com

Sample #	Sample Location	Component	Color	Substrate	Condition
PSBS-Pb008	PSB South / RM PS-2 / North wall	Wall	Brown	Plaster	P
Pb009	/ RM PS-1a / North west	Wall	Black	Glass	F
-Pb010	/ RM PS-5 / South west	Duct	Red	Metal	G
-Pb011	/ RM PS-2 / East wall	Duct	off white	Metal	G
-Pb012	/ RM PS-1 / South wall	Wall	off white	Drywall	G
-Pb013	/ RM PS-5 / North wall	Window frame	Green	Metal Wood AA	I
↓ -Pb014	↓ / RM PS-5 / North wall	Wall	Green	Wood	↓

Substrate: wood, metal, concrete, plaster, drywall, brick

Shipped via:

FedEx Airborne UPS US Mail **Overnight** Drop Off Other

Relinquished by: Radzinski
Date and Time: 03 June 2021 / 1310

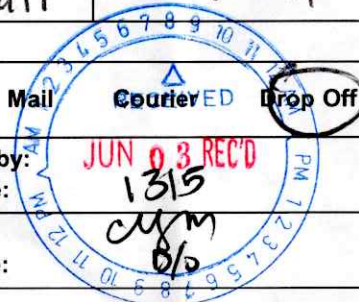
Relinquished by: JUN 03 REC'D 1315
Date and Time: cjm o/b

Relinquished by:
Date and Time:

Received by:
Date and Time:

Received by:
Date and Time:

Received by:
Date and Time:



Pair Chip Sample Request Form

Client: HAY01 **Site:** Contra Costa College 2600 Mission Bell Drive San Pablo, CA USA **Sampled By:** AA & JA
FACS: San Francisco, CA Office **Date:** 5/25/21
 Critical Solutions, Inc. **Client #:** C26770 **PM:** Gary Bruce Lowe
Contact: Gary Bruce Lowe **Phone:** 510-266-4600 **Proj #:** PJ63338

Turnaround Time: <12hr Same-D 1-Day 2-Day 3-Day **5-Day** Other Due Date & Time:

Analysis: **Flame AA (Pb)** Other

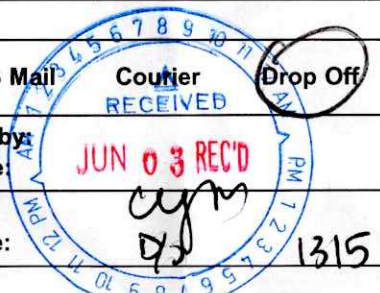
Email results to: FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com

Sample #	Sample Location	Component	Color	Substrate	Condition
PSBS-Pb015	PSB South / RM PS-6 / North wall	Base board	Baby blue	Wood	I
- Pb016	/ RM PS-8 / North wall	Baseboard	Brown	Wood	I
- Pb017	/ RM PS-10 / South wall	Baseboard	off white	Wood	I
- Pb018	/ RM PS-6 / Cabinet	Cabinet	Light Brown	Wood	I
- Pb019	/ Rm PS19 / RM-108	Door frame	Dark blue	Metal	I
- Pb020	/ - VOID -	Duct	off white	Metal	AA
↓ - Pb020	↓ / Rm PS-19 / RM-108	Door	Black	Metal	I

Substrate: wood, metal, concrete, plaster, drywall, brick

Shipped via: FedEx Airborne UPS US Mail Courier RECEIVED Drop Off Other

Relinquished by: Redzinski **Relinquished by:** **Relinquished by:**
Date and Time: 05/20/21 June 1/1310 **Date and Time:** JUN 03 REC'D **Date and Time:**
Received by: **Received by:** **Received by:**
Date and Time: **Date and Time:** **Date and Time:**



Pain Chip Sample Request Form

Client: HAY01

Site: Contra Costa College 2600 Mission Bell Drive
San Pablo, CA USA

Sampled By: AA & JA

FACS: San Francisco, CA Office

Date: 5/25/21

Critical Solutions, Inc.

Client #: C26770

PM: Gary Bruce Lowe

Contact: Gary Bruce Lowe

Phone: 510-266-4600

Proj #: PJ63338

Turnaround Time:

<12hr Same-D 1-Day 2-Day 3-Day **5-Day**

Other Due Date & Time:

Analysis:

Flame AA (Pb) Other

Email results to:

FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com

Sample #	Sample Location	Component	Color	Substrate	Condition
PSBS - Pb21	PSB South / RM - PS-5 North on Hood	HVAC unit	Orange	Metal	I
-Pb22	↓ / RM PS=6 South side	Exhaust hood	Light Orange	Transite	↓
-Pb23	↓ / RM - PS-14 South wall	Exhaust hood	Dark blue	Transite	↓
-Pb24	↓ / RM PS-6 South wall	Post	Dark Brown	Metal	↓
AA					
AA		AA			
AA					

Substrate: wood, metal, concrete, plaster, drywall, brick

Shipped via:

FedEx Airborne UPS US Mail **Courier** Drop Off Other

Relinquished by: Radzinski
Date and Time: 03 June 2021 / 1310

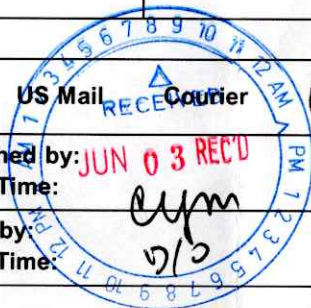
Relinquished by: JUN 03 REC'D
Date and Time: [Signature]

Relinquished by:
Date and Time:

Received by:
Date and Time:

Received by: [Signature]
Date and Time:

Received by:
Date and Time:



Pair Chip Sample Request Form

Client: HAY01

Site: Contra Costa College 2600 Mission Bell Drive
San Pablo, CA USA

Sampled By: AA/SS

FACS: San Francisco, CA Office

Date: 05/28/21

Critical Solutions, Inc.

Client #: C26770

PM: Gary Bruce Lowe

Contact: Gary Bruce Lowe

Phone: 510-266-4600

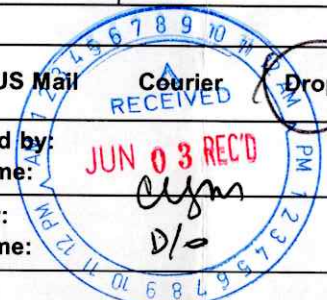
Proj #: PJ63338

Turnaround Time:	<12hr	Same-D	1-Day	2-Day	3-Day	<u>5-Day</u>	Other Due Date & Time:
Analysis:	<u>Flame AA (Pb)</u>	Other					
Email results to:	FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com						

Sample #	Sample Location	Component	Color	Substrate	Condition
PSBS - PB 25	PSB / Southeast area SOUTH EXTERIOR	Wall	White	Stucco	I
PB 26	North center area	Door	Brown	Metal	
PB 27	East center area	Post	Blue	Metal	∩
AA					

Substrate: wood, metal, concrete, plaster, drywall, brick

Shipped via:	FedEx	Airborne	UPS	US Mail	<input checked="" type="checkbox"/> Courier	<input checked="" type="checkbox"/> Drop Off	Other
Relinquished by: Rudzinski	Relinquished by: [Signature]			Relinquished by:			
Date and Time: 03 June 2021 / 12:00	Date and Time: JUN 03 REC'D [Signature]			Date and Time:			
Received by:	Received by: [Signature]			Received by:			
Date and Time:	Date and Time: [Signature]			Date and Time:			



Metals Analysis of Paints

(AIHA-LAP, LLC Accreditation, Lab ID #101762)

Forensic Analytical Consulting Svcs
Gary Lowe
21228 Cabot Blvd.

Hayward, CA 94545

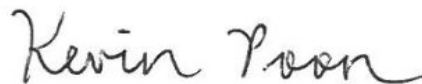
Client ID: HAY01
Report Number: M234279
Date Received: 06/03/21
Date Analyzed: 06/10/21
Date Printed: 06/10/21
First Reported: 06/10/21

Job ID / Site: PJ63338; Critical Solutions, Inc.
Date(s) Collected: 6/3/21

SGSFL Job ID: HAY01
Total Samples Submitted: 12
Total Samples Analyzed: 12

Sample Number	Lab Number	Analyte	Result	Result Units	Reporting Limit*	Method Reference
BR-01-P	30889528	Pb	0.11	wt%	0.007	EPA 3050B/7000B
BR-02-P	30889529	Pb	< 0.006	wt%	0.006	EPA 3050B/7000B
BR-03-P	30889530	Pb	1.4	wt%	0.07	EPA 3050B/7000B
BR-04-P	30889531	Pb	1.2	wt%	0.07	EPA 3050B/7000B
BR-05-P	30889532	Pb	< 0.007	wt%	0.007	EPA 3050B/7000B
BR-06-P	30889533	Pb	0.078	wt%	0.007	EPA 3050B/7000B
BR-07-P	30889534	Pb	0.019	wt%	0.007	EPA 3050B/7000B
BR-08-P	30889535	Pb	0.18	wt%	0.02	EPA 3050B/7000B
BR-09-P	30889536	Pb	1.4	wt%	0.2	EPA 3050B/7000B
BR-10-P	30889537	Pb	< 0.007	wt%	0.007	EPA 3050B/7000B
BR-11-P	30889538	Pb	0.007	wt%	0.006	EPA 3050B/7000B
BR-12-P	30889539	Pb	0.19	wt%	0.02	EPA 3050B/7000B

* The Reporting Limit represents the lowest amount of analyte that the laboratory can confidently detect in the sample, and is not a regulatory level. The Units for the Reporting Limit are the same as the Units for the Final Results.



Kevin Poon, Laboratory Analyst, Hayward Laboratory

Analytical results and reports are generated by SGS Forensic Laboratories at the request of and for the exclusive use of the person or entity (client) named on such report. Results, reports or copies of same will not be released by SGS Forensic Laboratories to any third party without prior written request from client. This report applies only to the sample(s) tested. Supporting laboratory documentation is available upon request. This report must not be reproduced except in full, unless approved by SGS Forensic Laboratories. The client is solely responsible for the use and interpretation of test results and reports requested from SGS Forensic Laboratories. SGS Forensic Laboratories is not able to assess the degree of hazard resulting from materials analyzed. SGS Forensic Laboratories reserves the right to dispose of all samples after a period of thirty (30) days, according to all state and federal guidelines, unless otherwise specified. Any modifications that have been made to referenced test methods are documented in SGS Forensic Laboratories' Standard Operating Procedures Manual. Sample results have not been blank corrected. Quality control and sample receipt condition were acceptable unless otherwise noted.

Note* Sampling data used in this report was provided by the client as noted on the associated chain of custody form.

Sampling Data Form / Chain of custody

Client: HAY01
FACS: San Francisco, CA Office
 Critical Solutions, Inc.

Site: Contra Costa College 2600 Mission Bell Drive San Pablo, CA USA

Sampled By: Sevilla / Radzinski
Sample Date: 03 June 2021
Proj #: PJ63338

Turnaround Time:	RUSH 24hr 48hr Extended (<u>5</u> days)
Analysis:	_____ PLM Standard: _____ PLM w/ Point Count: (_____ 400pt. _____ 1,000 pt.): X : FLAME AA
Email results to:	FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com

HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I/Cat II	Condition	Sample #	Sample Location	Lab result
05	Paint, pink	wall	pink	G	0702- ² BR-01-P	int., W. wall, v center	concrete metal
07	Paint	Transformer	blue	G	BR-02-P	int., transformer stand SW corner	metal
01	PAINT, BRICK RED	DOOR	BRICK RED	G	BR-03-P	BOILER ROOM / ENTRY DOOR / SW AREA	METAL
02	PAINT, BRICK RED #2	PIPE	BRICK RED	G	BR-04-P	↓ / EXT / SW CORNER / PIPE	METAL
03	PAINT, FIRE RED	CONTROL PANEL	FIRE RED	G	BR-05-P	BOILER ROOM / INT. / S. WALL / CONTROL PANEL	METAL
04	PAINT, FERRARI RED	PIPE FLANGE / CAPS	FERRARI RED	G	BR-06-P	↓ / INT. / N.W. CORNER / PIPE FLANGE	METAL
06	PAINT, YELLOW	PIPES / FLANGES	YELLOW	G	BR-07-P	↓ / ↓ / W. WALL / PIPE ADS TO ENTRY	METAL
08	PAINT, BLUE	TSI	BLUE	G	BR-08-P	↓ / INT / SE AREA / TSI ON PIPE	

DW = Drywall, JC = Joint Compound, WT=Wall Texture, VFT = Vinyl Floor Tile, VSF = Vinyl Sheet Flooring, BB = Baseboard, BBM = Baseboard Mastic, CM = Carpet Mastic, ACT = Acoustic Ceiling Tile, ACS = Sprayed-on Acoustic Ceiling Material, FP = Fireproofing, PI = Pipe Insulation, PFI = Pipe fitting insulation, WP = Plaster, CP = Ceiling Plaster, ES = Exterior Stucco

Relinquished by: <u>Radzinski</u> Date and Time: <u>03 June 2021 / 1310</u>	Relinquished by: Date and Time:	Relinquished by: Date and Time:
Received by: Date and Time:	Received by: Date and Time:	Received by: Date and Time:



Sampling Data Form / Chain of custody

Client: HAY01
FACS: San Francisco, CA Office
 Critical Solutions, Inc.

Site: Contra Costa College 2600 Mission Bell Drive San Pablo, CA USA

Sampled By: SEVILLA / RADZINSKI
Sample Date: 06/03/21
Proj #: PJ63338

Turnaround Time:	RUSH 24hr 48hr Extended (<u>5</u> days)
Analysis:	_____ PLM Standard: _____ PLM w/ Point Count: (_____ 400pt. _____ 1,000 pt.): X : FLAME AA
Email results to:	FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com

HA#	Homogeneous Material Description	COMPONENT COLOR		Condition	Sample #	Sample Location	Lab result
		Quant. in SF	Eriable/Cat L/Cat.H.				
09	PAINT, BLUE	DOOR FRAME	BLUE	G	BR-09-P	BOILER ROOM / INT / NE ENTRY / DOOR FRAME	
10	PAINT, GRAY / BLUE	FLOOR	GRAY / BLUE	P	BR-10-P	↓ / ↓ / SW AREA ADJ TO ENTRY	
11	PAINT, GRAY	PIPE	GRAY	F	BR-11-P	↓ / EXT / NE AREA / GAS METER	
12	PAINT, GRAY	PEDESTAL	GRAY	F	BR-12-P	↓ / INT / NE AREA / PEDESTAL	

DW = Drywall, JC = Joint Compound, WT=Wall Texture, VFT = Vinyl Floor Tile, VSF = Vinyl Sheet Flooring, BB = Baseboard, BBM = Baseboard Mastic, CM = Carpet Mastic, ACT = Acoustic Ceiling Tile, ACS = Sprayed-on Acoustic Ceiling Material, FP = Fireproofing, PI = Pipe Insulation, PFI = Pipe fitting insulation, WP = Plaster, CP = Ceiling Plaster, ES = Exterior Stucco

Relinquished by: Radzinski Date and Time: 03 June 2021 / 12:10	Relinquished by: Date and Time:	Relinquished by: Date and Time:
Received by: Date and Time:	Received by: Date and Time:	Received by: Date and Time:



Metals Analysis of Paints

(AIHA-LAP, LLC Accreditation, Lab ID #101762)

Forensic Analytical Consulting Svcs
Gary Lowe
21228 Cabot Blvd.

Hayward, CA 94545

Client ID: HAY01
Report Number: M234287
Date Received: 06/03/21
Date Analyzed: 06/11/21
Date Printed: 06/11/21
First Reported: 06/11/21

Job ID / Site: PJ63338; Critical Solutions, Inc.
Date(s) Collected: 05/26/21

SGSFL Job ID: HAY01
Total Samples Submitted: 25
Total Samples Analyzed: 25

Sample Number	Lab Number	Analyte	Result	Result Units	Reporting Limit*	Method Reference
PSBN-PB001	30889562	Pb	< 0.007	wt%	0.007	EPA 3050B/7000B
PSBN-PB002	30889563	Pb	< 0.006	wt%	0.006	EPA 3050B/7000B
PSBN-PB004	30889564	Pb	< 0.006	wt%	0.006	EPA 3050B/7000B
PSBN-PB005	30889565	Pb	0.089	wt%	0.006	EPA 3050B/7000B
PSBN-PB007	30889567	Pb	0.032	wt%	0.007	EPA 3050B/7000B
PSBN-PB008	30889568	Pb	< 0.007	wt%	0.007	EPA 3050B/7000B
PSBN-PB009	30889569	Pb	0.32	wt%	0.02	EPA 3050B/7000B
PSBN-PB010	30889570	Pb	0.032	wt%	0.007	EPA 3050B/7000B
PSBN-PB011	30889571	Pb	< 0.006	wt%	0.006	EPA 3050B/7000B
PSBN-PB012	30889572	Pb	< 0.006	wt%	0.006	EPA 3050B/7000B
PSBN-PB013	30889573	Pb	1.9	wt%	0.2	EPA 3050B/7000B
PSBN-PB014	30889574	Pb	< 0.006	wt%	0.006	EPA 3050B/7000B
PSBN-PB015	30889575	Pb	0.20	wt%	0.02	EPA 3050B/7000B
PSBN-PB016	30889576	Pb	< 0.007	wt%	0.007	EPA 3050B/7000B
PSBN-PB017	30889577	Pb	< 0.006	wt%	0.006	EPA 3050B/7000B
PSBN-PB019	30889579	Pb	0.008	wt%	0.007	EPA 3050B/7000B
PSBN-PB020	30889580	Pb	0.034	wt%	0.006	EPA 3050B/7000B
PSBN-PB021	30889581	Pb	< 0.006	wt%	0.006	EPA 3050B/7000B
PSBN-PB022	30889582	Pb	0.028	wt%	0.007	EPA 3050B/7000B
PSBN-PB023	30889583	Pb	< 0.007	wt%	0.007	EPA 3050B/7000B
PSBN-PB024	30889584	Pb	< 0.007	wt%	0.007	EPA 3050B/7000B
PSBN-PB025	30889585	Pb	< 0.006	wt%	0.006	EPA 3050B/7000B
PSBN-PB026	30889586	Pb	< 0.007	wt%	0.007	EPA 3050B/7000B
PSBN-PB027	30889587	Pb	0.12	wt%	0.007	EPA 3050B/7000B
PSBN-PB028	30889588	Pb	0.018	wt%	0.007	EPA 3050B/7000B

Metals Analysis of Paints

(AIHA-LAP, LLC Accreditation, Lab ID #101762)

Forensic Analytical Consulting Svcs
Gary Lowe
21228 Cabot Blvd.

Hayward, CA 94545

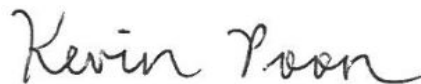
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Report Number: M234287
Date Received: 06/03/21
Date Analyzed: 06/11/21
Date Printed: 06/11/21
First Reported: 06/11/21

Job ID / Site: PJ63338; Critical Solutions, Inc.
Date(s) Collected: 05/26/21

SGSFL Job ID: HAY01
Total Samples Submitted: 25
Total Samples Analyzed: 25

Sample Number	Lab Number	Analyte	Result	Result Units	Reporting Limit*	Method Reference
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* The Reporting Limit represents the lowest amount of analyte that the laboratory can confidently detect in the sample, and is not a regulatory level. The Units for the Reporting Limit are the same as the Units for the Final Results.



Kevin Poon, Laboratory Analyst, Hayward Laboratory

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Note* Sampling data used in this report was provided by the client as noted on the associated chain of custody form.

Pair Chip Sample Request Form

Client: HAY01

Site: Contra Costa College 2600 Mission Bell Drive
San Pablo, CA USA

Sampled By: Jose Acosta

FACS: San Francisco, CA Office

Date: 05/26/2021 - 05/28/2021

Critical Solutions, Inc.

Client #: C26770

PM: Gary Bruce Lowe

Contact: Gary Bruce Lowe

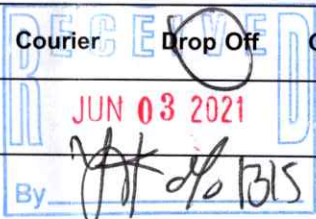
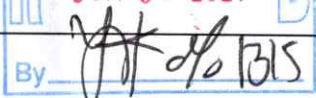
Phone: 510-266-4600

Proj #: PJ63338

Turnaround Time:	<12hr	Same-D	1-Day	2-Day	3-Day	5-Day	Other Due Date & Time:
Analysis:	Flame AA (Pb)	Other					
Email results to:	FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com						

Sample #	Sample Location	Component	Color	Substrate	Condition
PsbN-Pb001	PsbN / PS-109 / west wall	Wall	white	Drywall	I
-Pb002	/ PS-109 / Entrance	Door frame	Gray	Metal	↓
Pb003	VOID	Door	Gray	Metal	OLA
-Pb004	Corridor 1 above Entrance	Trim	Beige	Wood	I
-Pb005	Corridor 1 / Center	hand Rail	Gray	Metal	↓
-Pb006	VOID	Trim	Brown	wood	JLA
-Pb007	RM PS-113 / south above	Duct	Red	metal	I

ubstrate: wood, metal, concrete, plaster, drywall, brick

Shipped via:	FedEx	Airborne	UPS	US Mail	Drop Off	Courier	Other
Relinquished by: <i>Rafzinski</i>	Relinquished by:	Relinquished by:					Relinquished by:
Date and Time: <i>03 June 2021 / 13:10</i>	Date and Time:	Date and Time:					Date and Time:
Received by:	Received by:	Received by:					Received by:
Date and Time:	Date and Time:	Date and Time:					Date and Time:

Pain Chip Sample Request Form

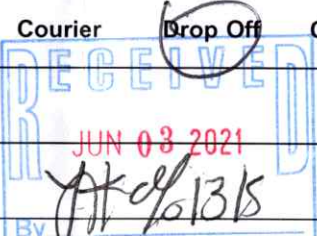
Client: HAY01 **Site:** Contra Costa College 2600 Mission Bell Drive **Sampled By:** JA
 San Pablo, CA USA
FACS: San Francisco, CA Office **Date:** 5/26/21 - 5/28/21
 Critical Solutions, Inc. **Client #:** C26770 **PM:** Gary Bruce Lowe
Contact: Gary Bruce Lowe **Phone:** 510-266-4600 **Proj #:** PJ63338

Turnaround Time: <12hr Same-D 1-Day 2-Day 3-Day 5-Day Other Due Date & Time:
Analysis: Flame AA (Pb) Other
Email results to: FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com

Sample #	Sample Location	Component	Color	Substrate	Condition
Psbm - Pb008	Psbm RM-PS-113 / North wall	Wall	Baby Blue	Drywall	I
- Pb009	RM-PS-123 / Door Frame	Door frame	Black	metal	↓
- Pb010	RM-PS-118 / Door Frame	Door frame	white	metal	
- Pb011	RM-PS-118 / wall	wall	Gray	wood	
- Pb012	RM-PS-118 / close to ceiling	Trim	white	wood	
- Pb013	RM-PS-113 / on Light fixture	Fixture	yellow	metal	
↓ - Pb014	↓ RM-PS-106 / North wall	Trim	Baby Blue	wood	

substrate: wood, metal, concrete, plaster, drywall, brick

Shipped via: FedEx Airborne UPS US Mail Courier Drop Off Other
Relinquished by: Redzinski **Relinquished by:** **Relinquished by:**
Date and Time: 03 June 2021 / 1310 **Date and Time:** **Date and Time:**
Received by: **Received by:** **Received by:**
Date and Time: **Date and Time:** **Date and Time:**



Pair Chip Sample Request Form

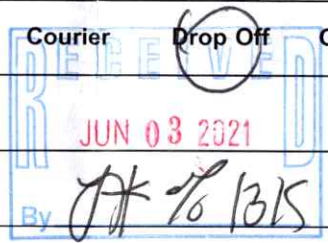
Client: HAY01 **Site:** Contra Costa College 2600 Mission Bell Drive San Pablo, CA USA **Sampled By:** JA
FACS: San Francisco, CA Office **Client #:** C26770 **Date:** 5/26/21 - 5/28/21
 Critical Solutions, Inc. **Phone:** 510-266-4600 **PM:** Gary Bruce Lowe
Contact: Gary Bruce Lowe **Proj #:** PJ63338

Turnaround Time:	<input type="checkbox"/> <12hr <input type="checkbox"/> Same-D <input type="checkbox"/> 1-Day <input type="checkbox"/> 2-Day <input type="checkbox"/> 3-Day <input checked="" type="checkbox"/> 5-Day Other Due Date & Time:
Analysis:	<input checked="" type="checkbox"/> Flame AA (Pb) <input type="checkbox"/> Other
Email results to:	FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com

Sample #	Sample Location	Component	Color	Substrate	Condition
Psb n - Pb015	Psb n / RM PS-106 / Door Frame	Door Frame	Brown	metal	I
- Pb016	RM-PS-132 / above ceiling	wall column	Black	Drywall	↓
- Pb017	womans RR / south wall	FLOOR tile Ceramic FT-JLA	Brown	ceramic	
- Pb018	Corridor 2 / casing	Void	Beige	metal	
- Pb019	woman's RR / south wall	wall tile	Red	ceramic	
- Pb020	RM 130 / north west corner	wall	yellow	Drywall	
✓ - Pb021	✓ RM exploritorium / 132 Entrance	wall	Black	wood	

ubstrate: wood, metal, concrete, plaster, drywall, brick

Shipped via:	<input type="checkbox"/> FedEx <input type="checkbox"/> Airborne <input type="checkbox"/> UPS <input type="checkbox"/> US Mail <input checked="" type="checkbox"/> Courier <input type="checkbox"/> Drop Off <input type="checkbox"/> Other	
Relinquished by: Radzinski Date and Time: 03 June 2021 / 1310	Relinquished by: Date and Time:	Relinquished by: Date and Time:
Received by: Date and Time:	Received by: Date and Time:	Received by: Date and Time:



Pair Chip Sample Request Form

Client: HAY01

Site: Contra Costa College 2600 Mission Bell Drive
San Pablo, CA USA

Sampled By: JA & AA

FACS: San Francisco, CA Office

Date: 5/26/21 - 5/28/21

Critical Solutions, Inc.

Client #: C26770

PM: Gary Bruce Lowe

Contact: Gary Bruce Lowe

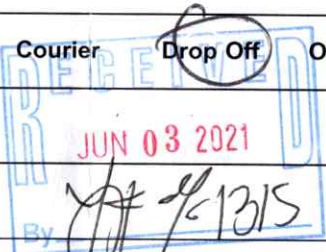
Phone: 510-266-4600

Proj #: PJ63338

Turnaround Time:	<12hr	Same-D	1-Day	2-Day	3-Day	5-Day	Other Due Date & Time:
Analysis:	Flame AA (Pb)	Other					
Email results to:	FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com						

Sample #	Sample Location	Component	Color	Substrate	Condition
PsbN - Pb022	PSB north / ↓ Corridor / above ceiling beam	Beam	Red	Metal	I
- Pb023	PSB North / Roof / Roof F / West area	Gutter	Brown	Metal	
- Pb024	/ Roof G / SW area	Dome joint	Red	Metal	
- Pb025	↓ / ↓	Dome siding	Red	Wood	↓
- Pb026	/ Roof J / South area	Cabinet door	Black	Wood	P
- Pb027	↓ / Roof J / South area	Rail	Brown	Metal	I
- Pb028	PSB North exterior / North area, North door	Door	Black	Metal	↓

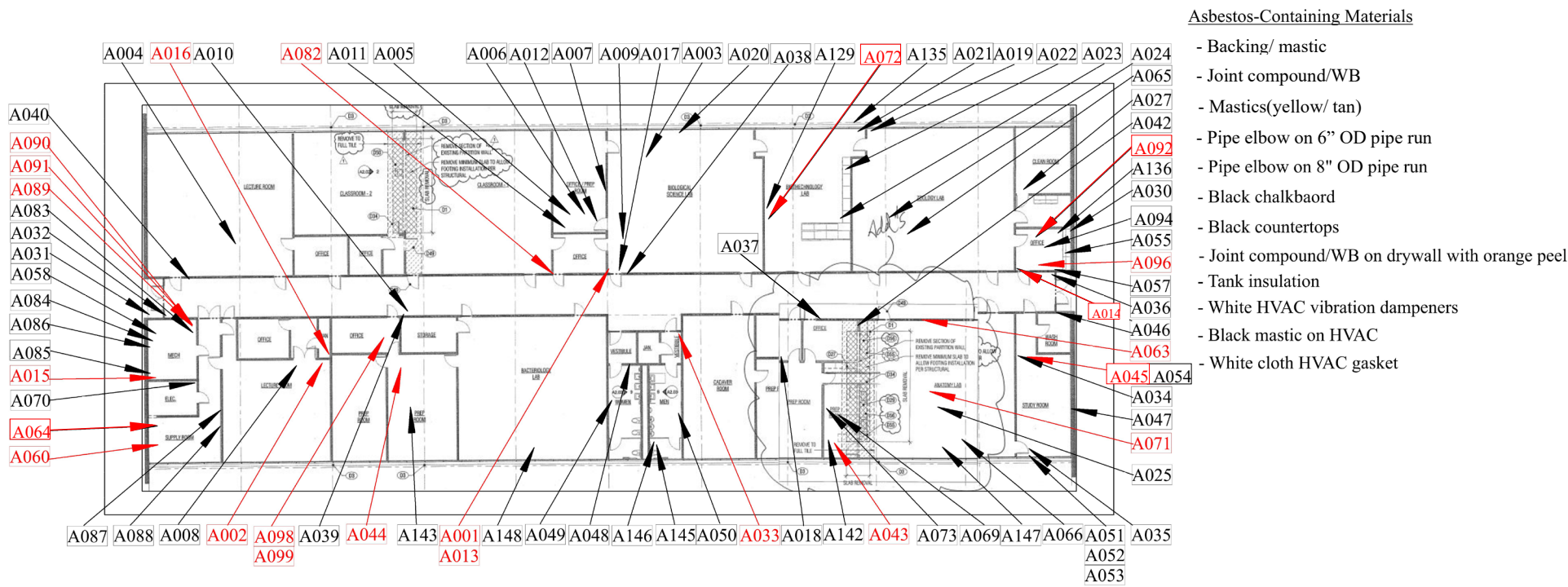
Substrate: wood, metal, concrete, plaster, drywall, brick

Shipped via:	FedEx	Airborne	UPS	US Mail	Courier	Drop Off	Other
Relinquished by: Radzawski	Relinquished by:		Relinquished by:				
Date and Time: 03 June 2021 / 12:10	Date and Time:		Date and Time:				
Received by:	Received by:		Received by:				
Date and Time:	Date and Time:		Date and Time:				

Appendix B

Sample Location Drawings





- Asbestos-Containing Materials**
- Backing/ mastic
 - Joint compound/WB
 - Mastics(yellow/ tan)
 - Pipe elbow on 6" OD pipe run
 - Pipe elbow on 8" OD pipe run
 - Black chalkboard
 - Black countertops
 - Joint compound/WB on drywall with orange peel
 - Tank insulation
 - White HVAC vibration dampeners
 - Black mastic on HVAC
 - White cloth HVAC gasket

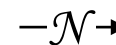
Biological Science Building – Asbestos Sample Location Map, Page 1

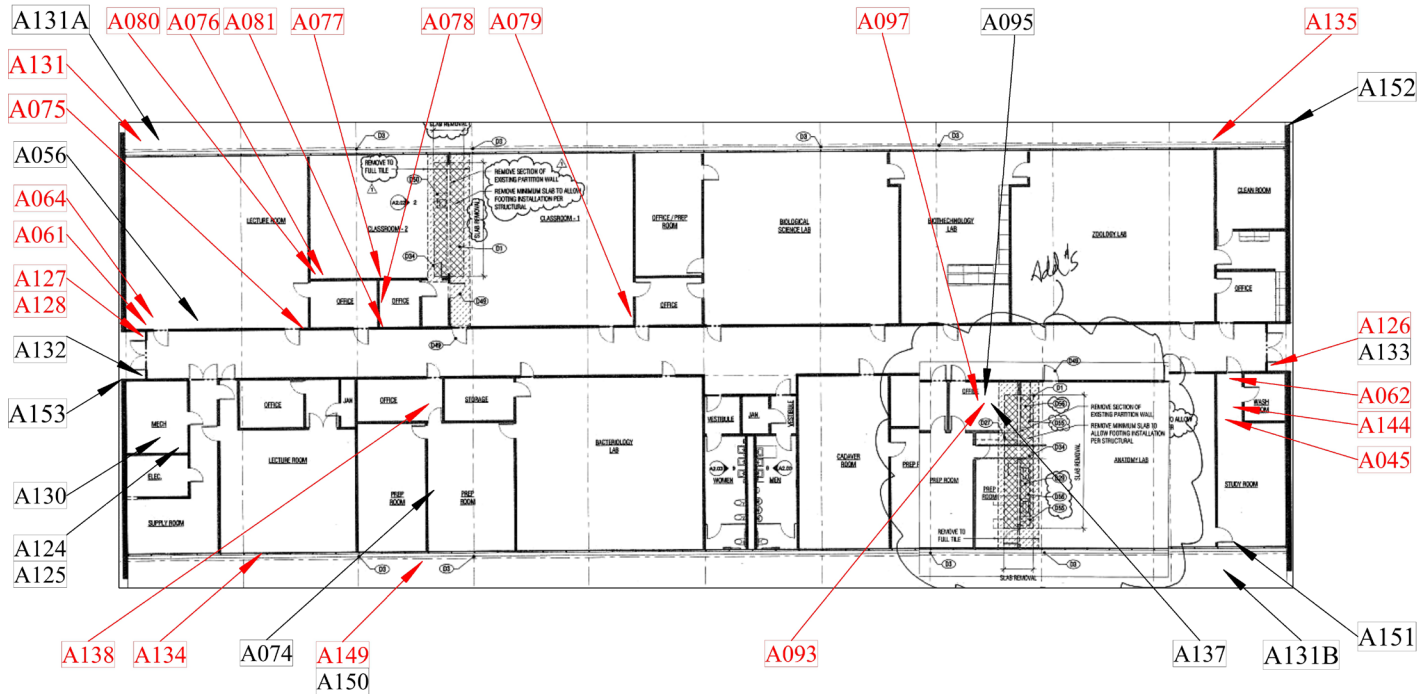
SAMPLE LOCATION MAP

Contra Costa College New Science Building Project
 2600 Mission Bell Drive
 San Pablo, CA 94806
 FACS # PJ63338, May 24 to June 2, 2021

LEGEND

Positive Asbestos Bulk Sample Location: **BIO – A001, A002, A013-A016, A033, A043-A045, A060, A063, A064, A071, A072, A082, A089-A092, A096, A098, A099**





Asbestos-Containing Materials

- Pipe elbow on 6" OD pipe run
- Black chalkboard
- Texture
- Joint compound/WB on drywall with orange peel
- White HVAC vibration dampeners
- Black mastic on HVAC
- Skim coat
- Concrete slab exterior
- Light gray caulk exterior

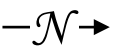
Biological Science Building – Asbestos Sample Location Map, Page 2

SAMPLE LOCATION MAP







Contra Costa College New Science Building
 Project
 2600 Mission Bell Drive
 San Pablo, CA 94806
 FACS # PJ63338, May 24 to June 2, 2021

LEGEND

Positive Asbestos Bulk Sample Location: **BIO – A045, A061, A062, A064, A075-A081, A093, A097, A126-A128, A131, A134, A135, A138, A144, A149**



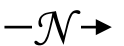


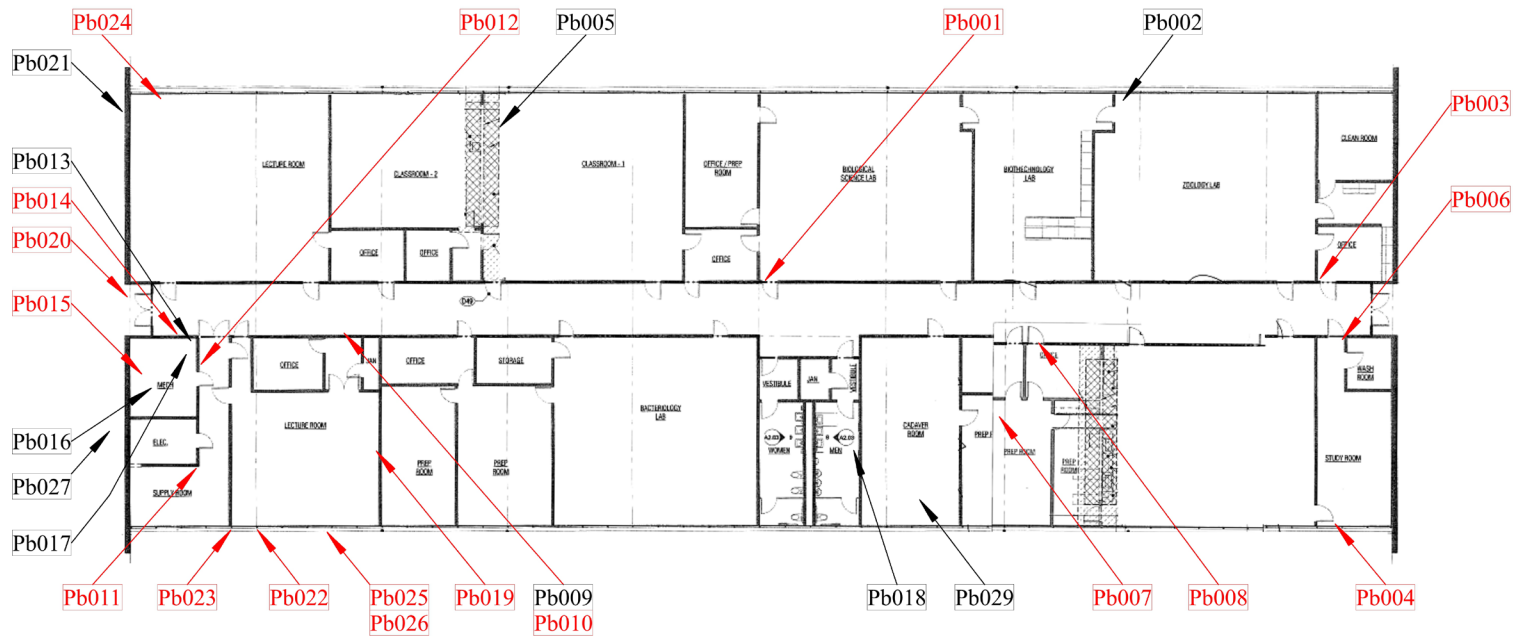
-  - Tan sheet flooring w/ mottle pattern
-  - Green carpet mastic
-  - 12" x 12" FT off-white w/ blue specks over yellow mastic
-  - 12" x 12" FT off-white w/ gray streaks w/ yellow mastic
-  - Beige sheet flooring w/ mottle pattern
-  - Dark tan RSF w/ mottle pattern

Biological Science Building – Homogeneous Area Map

HOMOGENEOUS AREA MAP

Contra Costa College New Science Building
 Project
 2600 Mission Bell Drive
 San Pablo, CA 94806
 FACS # PJ63338, May 24 to June 2, 2021





Lead-Containing Materials

- Orange paint on gypsum board wall
- Beige paint on gypsum board wall
- Off-white paint on plaster wall
- Black paint on metal I-beam
- White paint on wood wall trim
- Blue paint on wood door
- Off-white paint on wood beam
- Yellow paint on metal pipe
- Red paint on metal pipe valve
- White paint on stucco soffit
- White paint on metal louver shade
- Beige paint on metal wall louver header trim
- Brown paint on metal parapet cap
- White paint on wood eave joist
- Gray paint on metal exhaust flue
- Off-white ceramic wall

Biological Science Building – Lead Sample Location Map

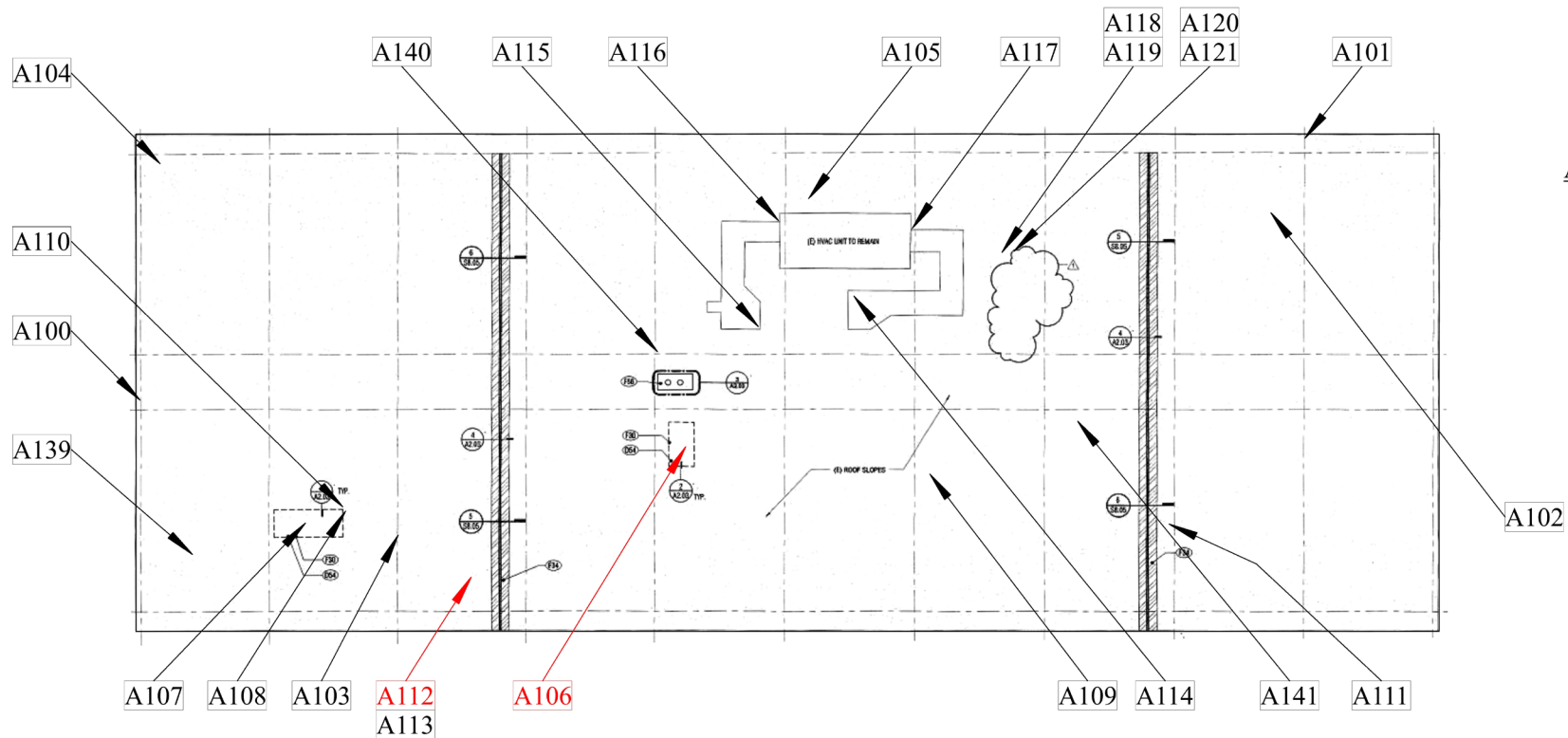
SAMPLE LOCATION MAP

Contra Costa College New Science Building
 Project
 2600 Mission Bell Drive
 San Pablo, CA 94806
 FACS # PJ63338, May 24 to June 2, 2021

LEGEND

Positive Lead Bulk Sample Location: **BIO – Pb001, Pb003, Pb004, Pb006, Pb007, Pb008, Pb010, Pb011, Pb012, Pb014, Pb015, Pb019, Pb020, Pb022, Pb023, Pb024, Pb025, Pb026**





Asbestos-Containing Materials

- Paint (silver)
- Dark gray sealant

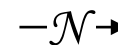
Biological Science Building, Roof – Asbestos Sample Location Map

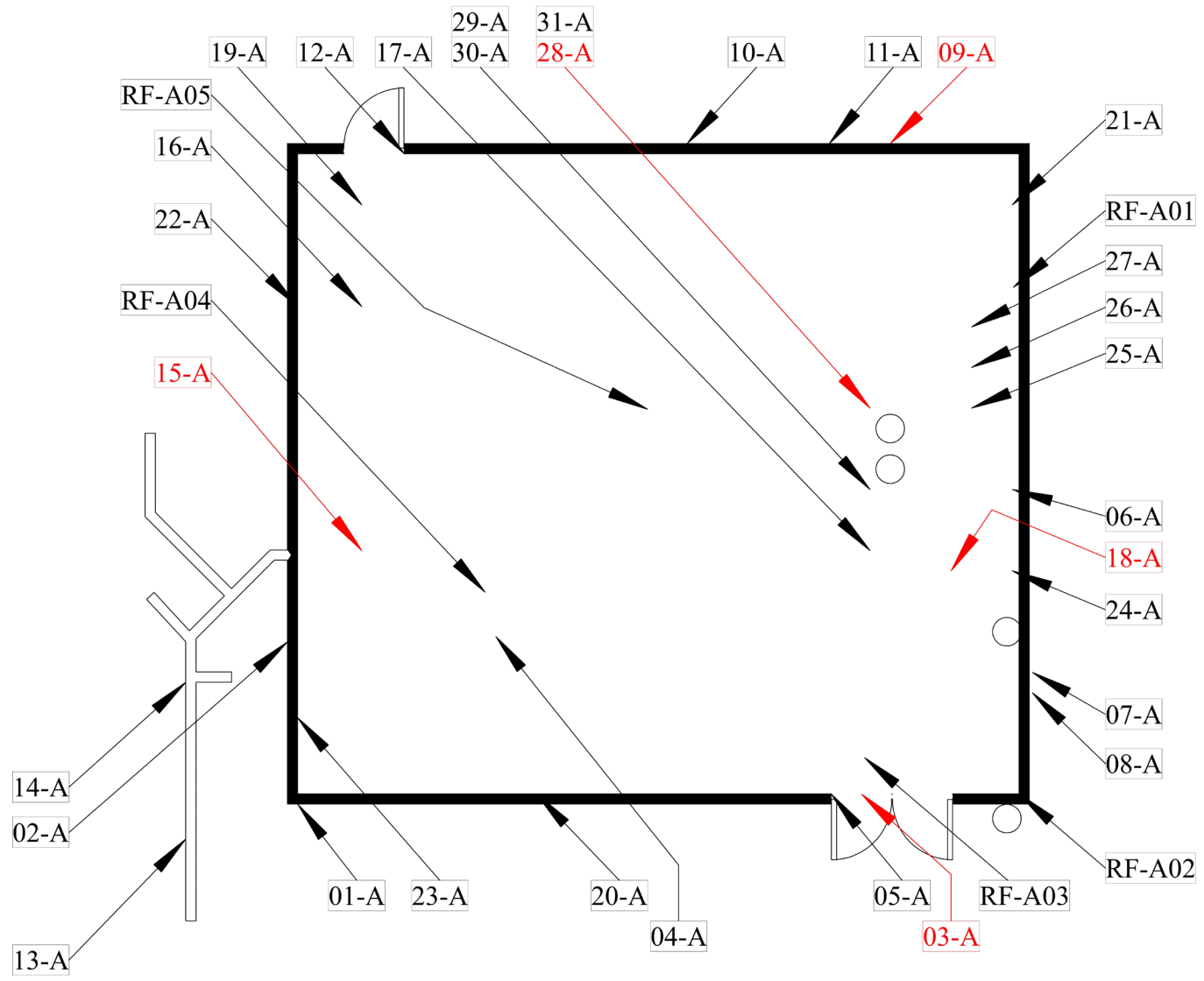
SAMPLE LOCATION MAP

Contra Costa College New Science Building
 Project
 2600 Mission Bell Drive
 San Pablo, CA 94806
 FACS # PJ63338, May 24 to June 2, 2021

LEGEND

Positive Asbestos Bulk Sample Location: **BIO – A106, A112**





Asbestos-Containing Materials

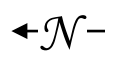
- Concrete
- Sealant
- TSI

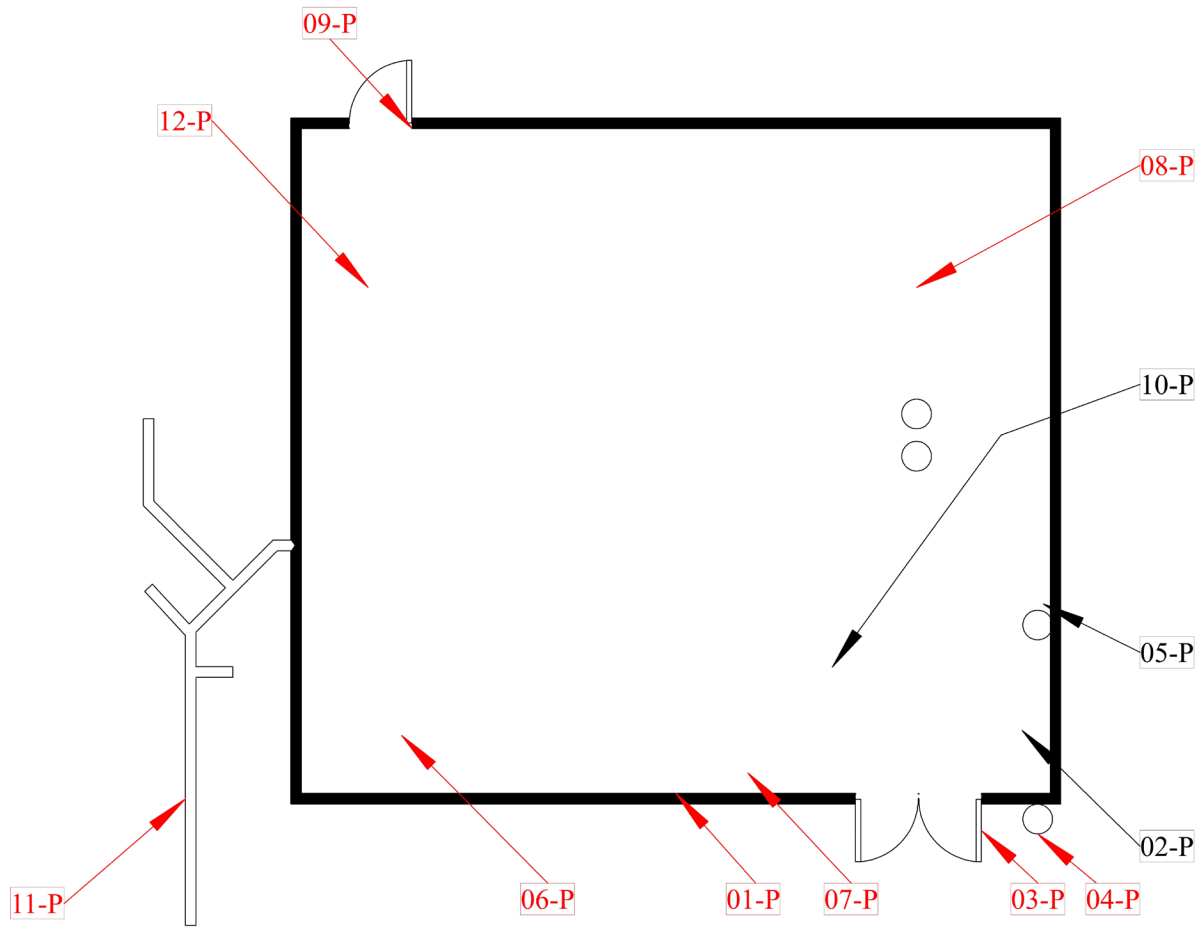
Boiler Room

SAMPLE LOCATION DRAWING
 Contra Costa College New Science Building
 Project
 2600 Mission Bell Drive
 San Pablo, CA 94806
 FACS # PJ63338, May 24 to June 2, 2021

LEGEND
 Positive Asbestos Bulk Sample Location: **BR - 03-A, 09-A, 15-A, 18-A, 28-A**

FACS 35
 Forensic Analytical Consulting Services
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Lead-Containing Materials

- Pink paint on concrete wall
- Brick red paint on metal door
- Brick red paint on metal pipe
- Ferrari red paint on metal pipe flange/caps
- Yellow paint on metal pipes/flanges
- Blue paint on TSI
- Blue paint on metal doorframe
- Grey paint on metal pipe
- Grey paint on metal pedestal

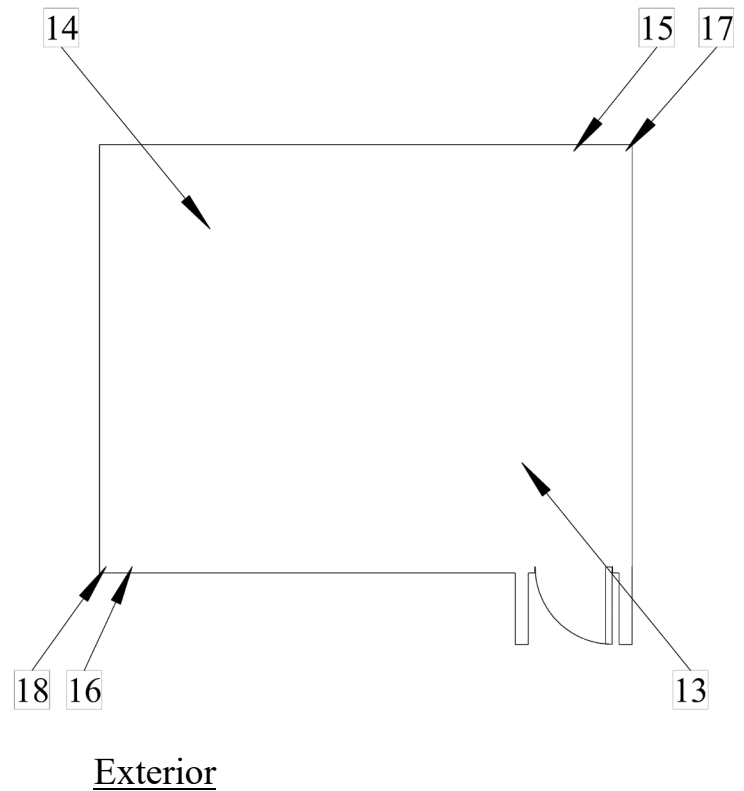
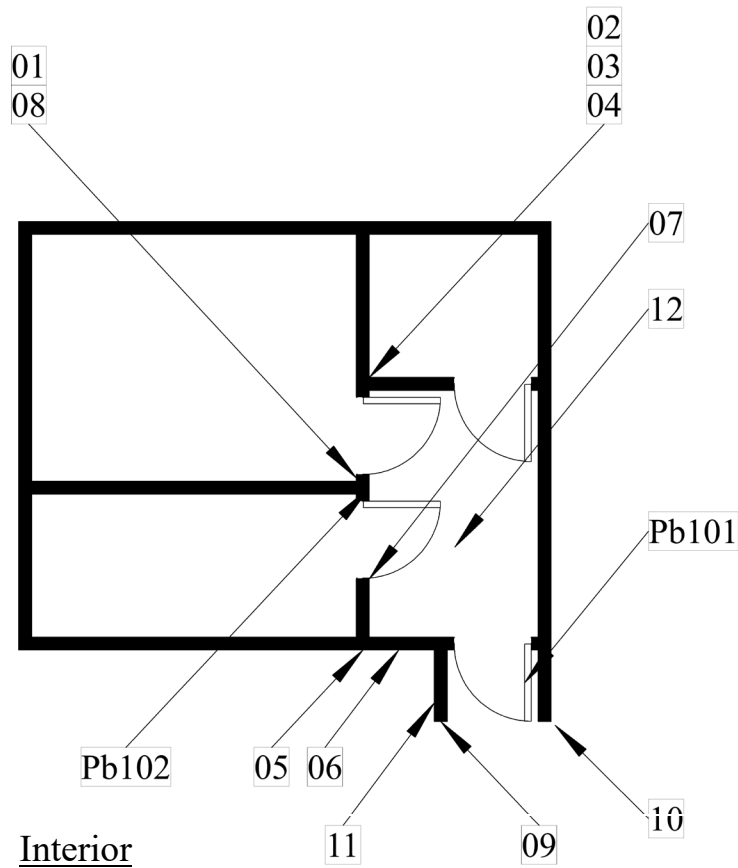
Boiler Room – Lead Sample Location Drawing

SAMPLE LOCATION DRAWING

Contra Costa College New Science Building
 Project
 2600 Mission Bell Drive
 San Pablo, CA 94806
 FACS # PJ63338, May 24 to June 2, 2021

LEGEND

Positive Lead Bulk Sample Location: BR – 01-P, 03-P, 04-P, 06-P,
 07-P, 08-P, 09-P, 11-P, 12-P



Chemical Storage Building – Asbestos and Lead Sample Location Drawing

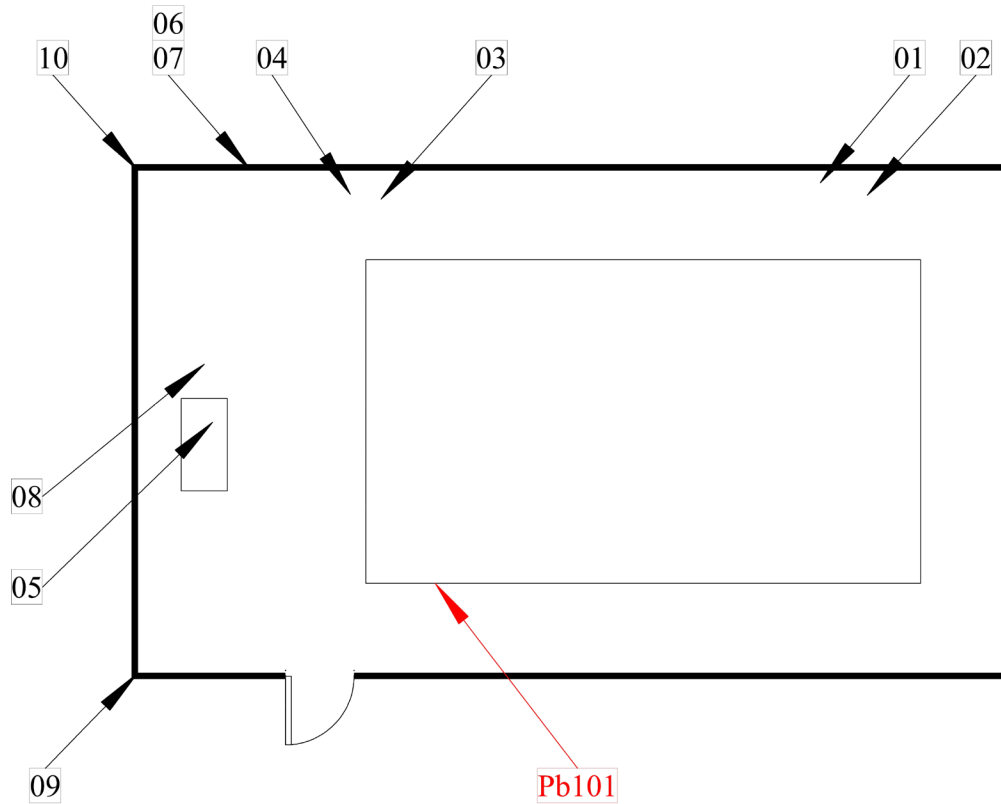
SAMPLE LOCATION DRAWING

Contra Costa College New Science Building
Project
2600 Mission Bell Drive
San Pablo, CA 94806
FACS # PJ63338, May 24 to June 2, 2021

LEGEND

Positive Asbestos Bulk Sample Location: N/A
Positive Lead Bulk Sample Location: N/A





Lead-Containing Materials

- Gray paint on metal chiller component

Chiller Enclosure – Asbestos and Lead Sample Location Drawing

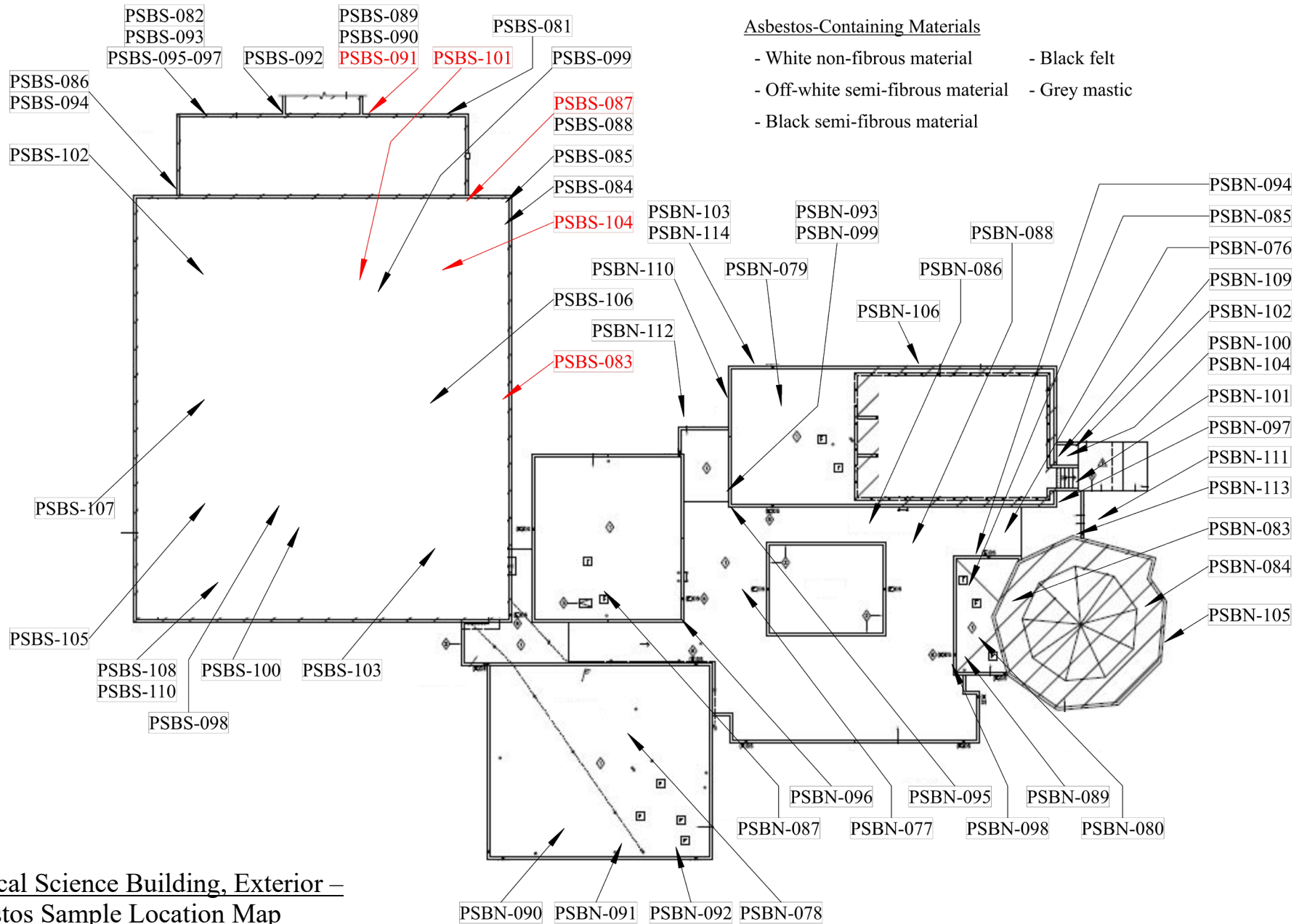
SAMPLE LOCATION DRAWING

Contra Costa College New Science Building
 Project
 2600 Mission Bell Drive
 San Pablo, CA 94806
 FACS # PJ63338, May 24 to June 2, 2021

LEGEND

Positive Asbestos Bulk Sample Location: N/A
 Positive Lead Bulk Sample Location: **CE-Pb-101**





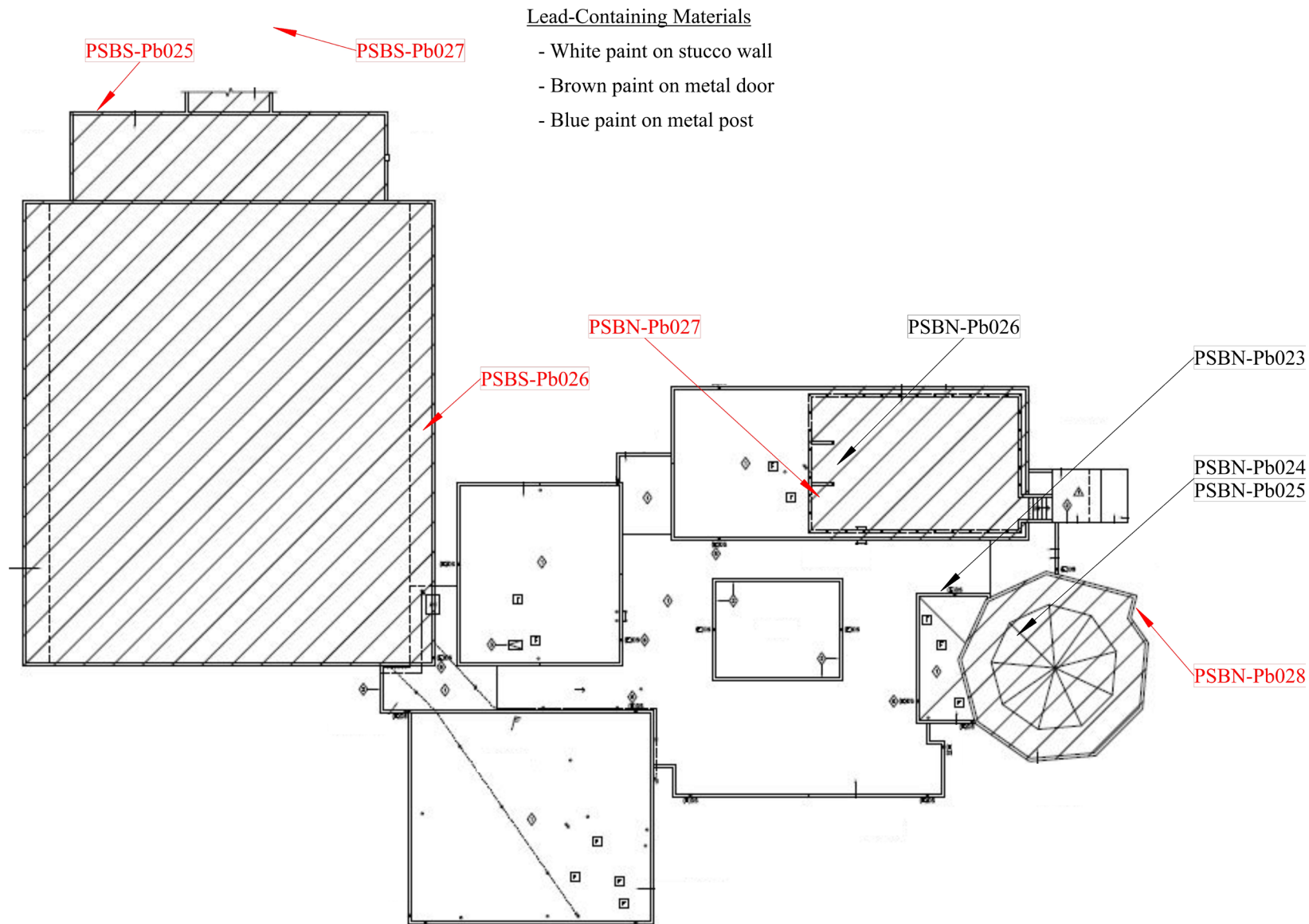
SAMPLE LOCATION MAP

Contra Costa College New Science Building Project
 2600 Mission Bell Drive
 San Pablo, CA 94806
 FACS # PJ63338, May 24 to June 2, 2021

LEGEND

Positive Asbestos Bulk Sample Location: **PSBS – 083, 087, 091, 101, 104**





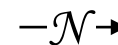
Physical Science Building, Exterior – Lead Sample Location Map

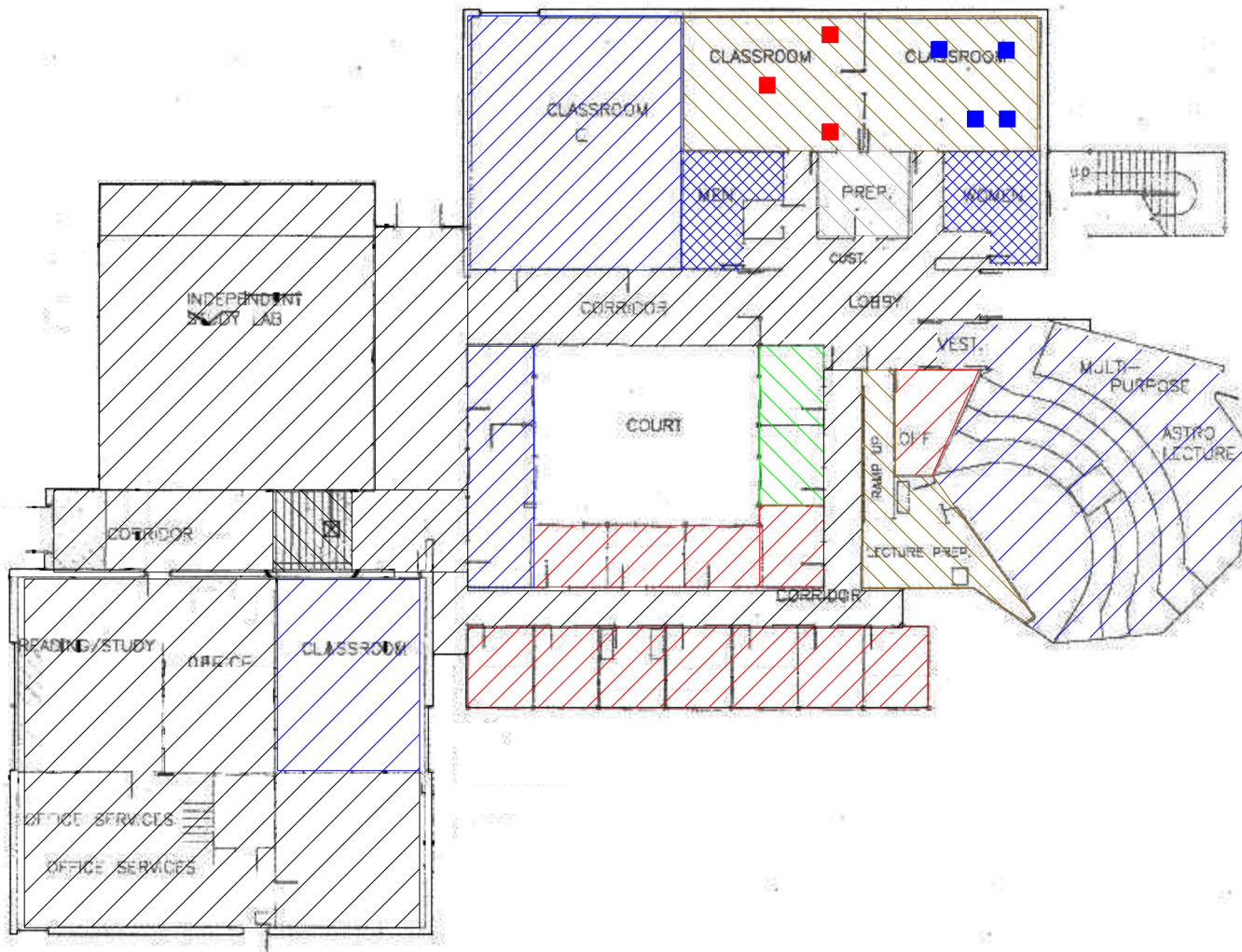
SAMPLE LOCATION MAP







Contra Costa College New Science Building Project
 2600 Mission Bell Drive
 San Pablo, CA 94806
 FACS # PJ63338, May 24 to June 2, 2021

LEGEND

Positive Lead Bulk Sample Location: **PSBS – Pb025, Pb026, Pb027**
PSBN – Pb027, Pb028

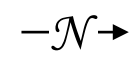


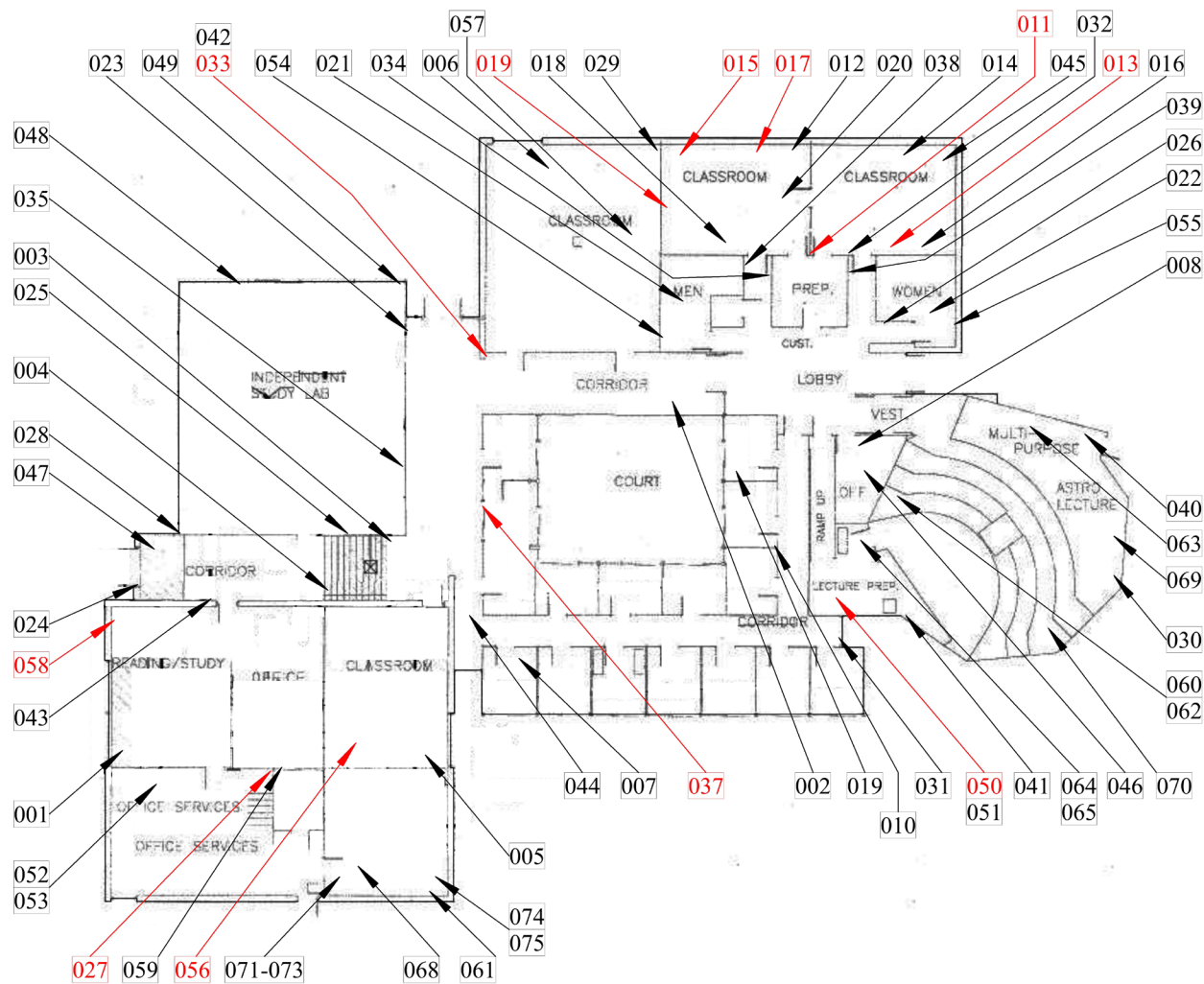


-  - 12" x 12" White w/ blue specks FT
-  - Gray VSF
-  - Blue carpet
-  - Red carpet
-  - Brown carpet
-  - 12" x 12" Brown w/ white specks FT
-  - 12" x 12" Dark gray w/ white streaks FT
-  - 12" x 12" Blue w/ white streaks FT
-  - 12" x 12" Red FT
-  - 2" x 2" Gray ceramic FT and grout

Physical Science Building, North Area – Homogeneous Area Map

HOMOGENEOUS AREA MAP
 Contra Costa College New Science Building
 Project
 2600 Mission Bell Drive
 San Pablo, CA 94806
 FACS # PJ63338, May 24 to June 2, 2021





Asbestos-Containing Materials

- 12" x 12" Brown w/ white specks FT over black mastic
- 12" x 12" Blue w/ white streaks FT over black mastic
- 12" x 12" Beige w/ gray streaks FT over black and brown mastic
- 12" x 12" Red FT over black mastic
- 12" x 12" Gray w/ black dots FT over black mastic
- Wallboard/ joint compound
- Wall texture large splotch
- Wall texture orange peel splotch
- White sink undercoat
- Black lab table
- Black window caulking

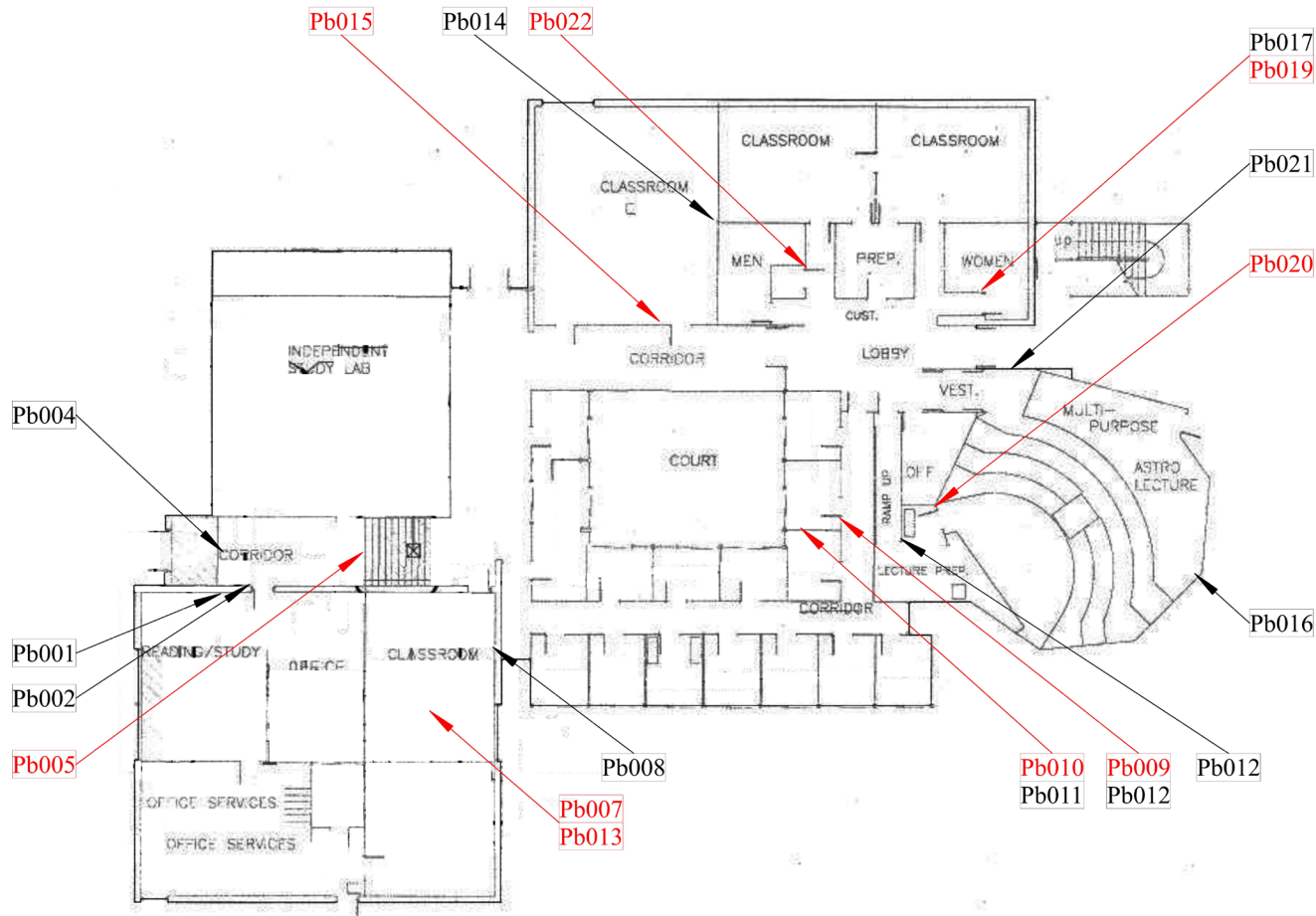
Physical Science Building – North Area

SAMPLE LOCATION DRAWING

Contra Costa College New Science Building
 Project
 2600 Mission Bell Drive
 San Pablo, CA 94806
 FACS # PJ63338, May 24 to May 28, 2021

LEGEND

Positive Asbestos Bulk Sample Location: **PSBN – 011, 013, 015, 017, 019, 027, 033, 037, 050, 056, 058**



Lead-Containing Materials

- Gray paint on metal handrail
- Red paint on metal duct
- Black paint on metal doorframe
- White paint on metal doorframe
- Yellow paint on metal fixture
- Brown paint on metal doorframe
- Red ceramic wall tile
- Yellow paint on gypsum board wall
- Red paint on metal beam

Physical Science Building, North Area, Interior – Lead Sample Location Map







SAMPLE LOCATION MAP

Contra Costa College New Science Building
Project
2600 Mission Bell Drive
San Pablo, CA 94806
FACS # PJ63338, May 24 to June 2, 2021

LEGEND

Positive Lead Bulk Sample Location: **PSBN – Pb005, Pb007, Pb009, Pb010, Pb013, Pb015, Pb019, Pb020, Pb022**

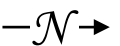


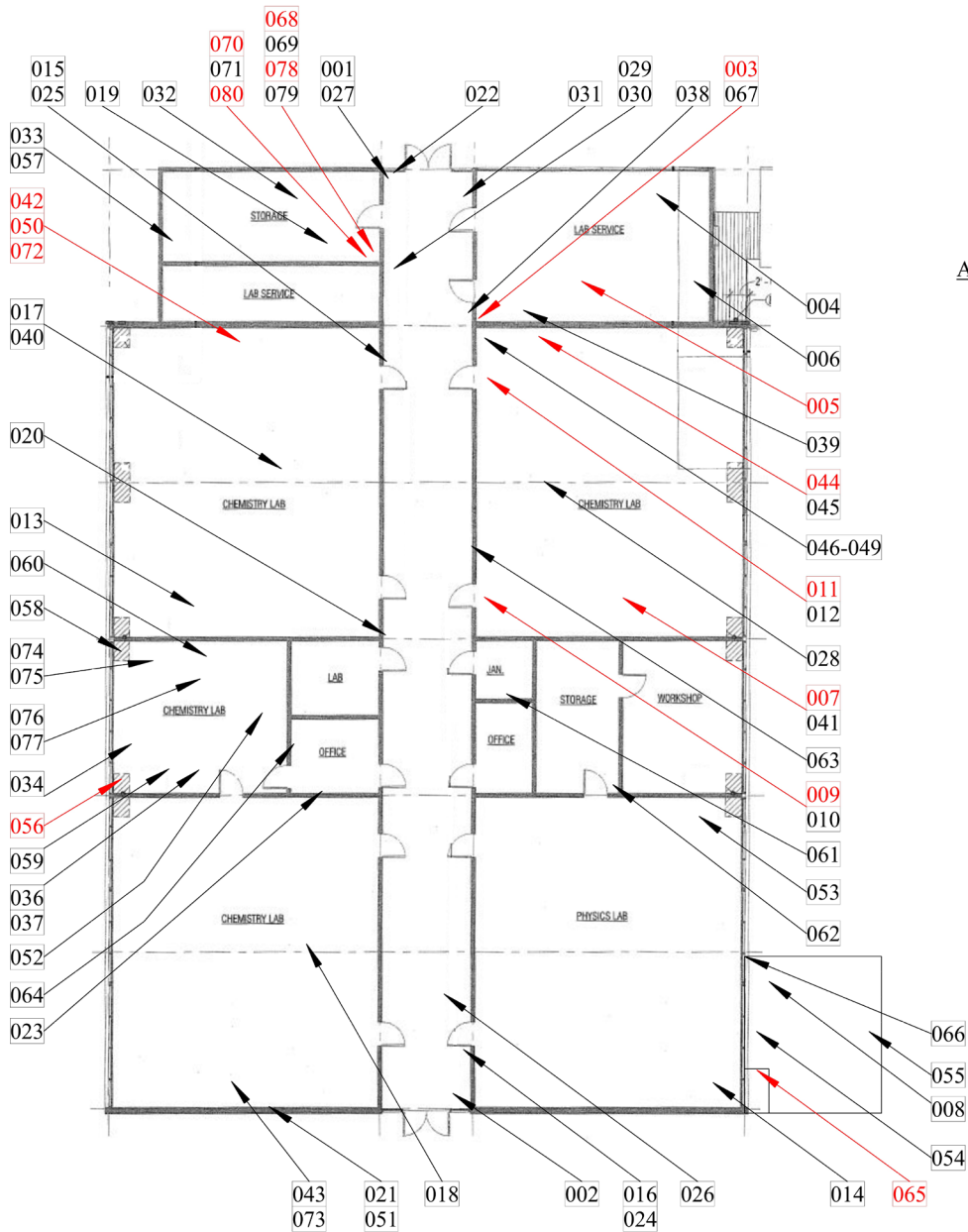
-  - 12" x 12" Gray w/ green streaks FT
-  - 9" x 9" Tan w/ brown streaks FT
-  - 12" x 12" Beige w/ dark gray and white specks FT
-  - 12" x 12" Dark gray w/ white streaks FT
-  - 12" x 12" Red w/ black streaks FT
-  - 12" x 12" Light brown w/ white streaks FT

Physical Science Building, South Area – Homogeneous Area Map

HOMOGENEOUS AREA MAP

Contra Costa College New Science Building
 Project
 2600 Mission Bell Drive
 San Pablo, CA 94806
 FACS # PJ63338, May 24 to June 2, 2021





Asbestos-Containing Materials

- 9" x 9" Tan w/ brown streaks FT over black mastic
- 12" x 12" Beige w/ dark brown and white streaks FT over black mastic
- 12" x 12" Dark gray w/ white streaks FT over black mastic
- 12" x 12" Red w/ black streaks FT over black and yellow mastic
- 12" x 12" Light brown w/ white streaks FT over yellow mastic
- Black exhaust system table top
- Gray exhaust system transite panel
- Black exhaust system transite panel
- Wallboard/ joint compound
- Off-white transite pipe fitting
- Pipe penetration tape and insulation
- Transite exhaust hood
- White transite pipe

Physical Science Building – South Area

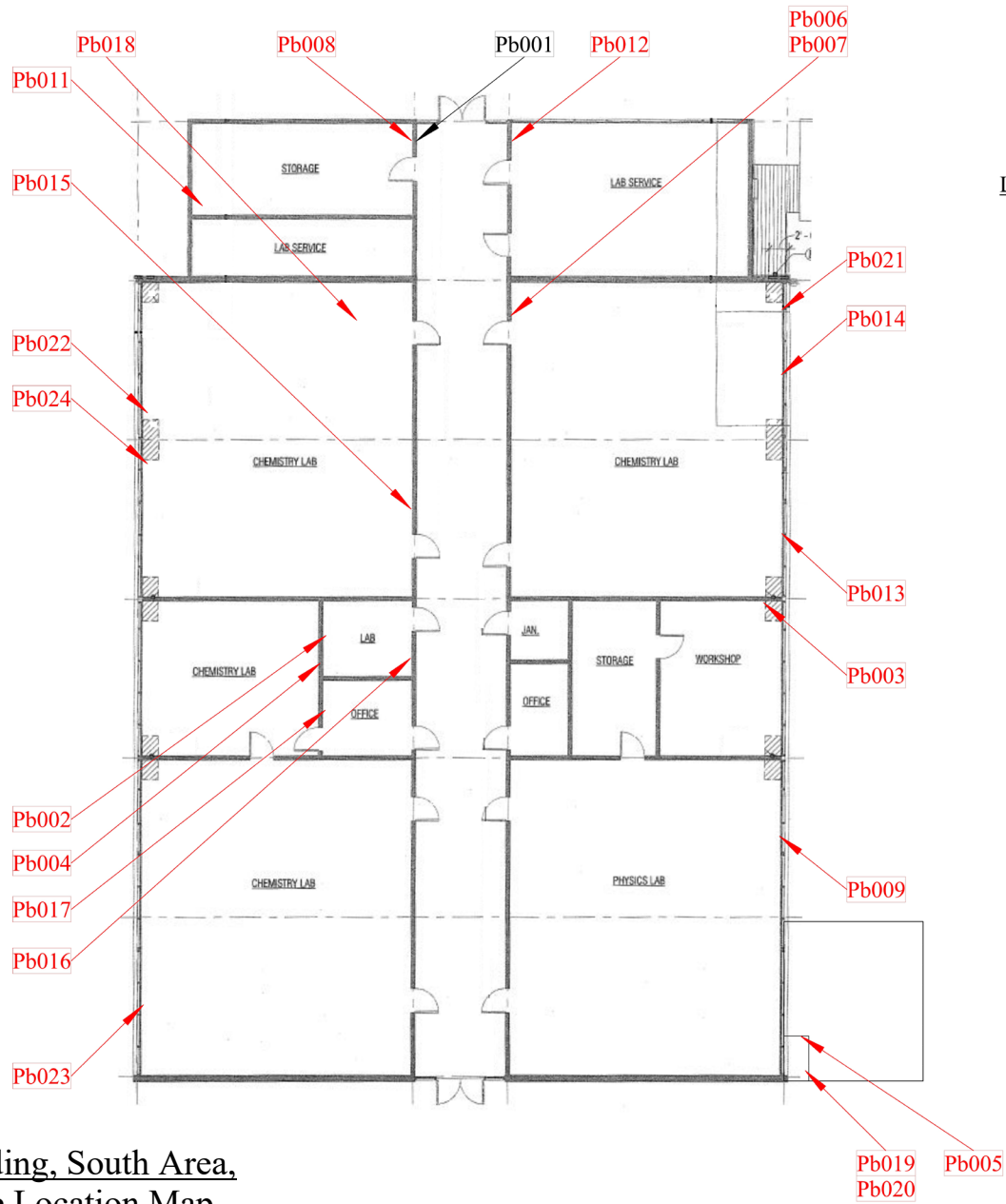
SAMPLE LOCATION DRAWING

Contra Costa College New Science Building
 Project
 2600 Mission Bell Drive
 San Pablo, CA 94806
 FACS # PJ63338, May 24 to May 28, 2021

LEGEND

Positive Asbestos Bulk Sample Location: **PSBS - 003, 005, 007, 009, 011, 042, 044, 050, 056, 065, 068, 070, 072, 078, 080**





Lead-Containing Materials

- Light orange paint on plaster
- Off-white paint on plaster
- Orange paint on plaster
- Dark blue paint on drywall
- Brown paint on metal
- Baby blue paint on metal
- Brown paint on plaster
- Black paint on glass
- Red paint on metal
- Off-white paint on metal
- Off-white paint on drywall
- Green paint on metal
- Green paint on wood
- Baby blue paint on wood
- Brown paint on wood
- Off-white paint on wood
- Light brown paint on wood
- Dark blue paint on metal
- Black paint on metal
- Orange paint on metal
- Light orange paint on transite
- Dark blue paint on transite
- Dark brown paint on metal

**Physical Science Building, South Area,
Interior – Lead Sample Location Map**

SAMPLE LOCATION MAP

Contra Costa College New Science Building
Project
2600 Mission Bell Drive
San Pablo, CA 94806
FACS # PJ63338, May 24 to June 2, 2021

LEGEND

Positive Lead Bulk Sample Location: **PSBS – Pb002, Pb003, Pb004, Pb005, Pb006, Pb007, Pb008, Pb009, Pb011, Pb012, Pb013, Pb014, Pb015, Pb016, Pb017, Pb018, Pb019, Pb020, Pb021, Pb022, Pb023, Pb024**



Appendix C

CDPH Form



LEAD HAZARD EVALUATION REPORT

Section 1 – Date of Lead Hazard Evaluation _____

Section 2 – Type of Lead Hazard Evaluation (Check one box only)

Lead Inspection Risk assessment Clearance Inspection Other (specify) _____

Section 3 – Structure Where Lead Hazard Evaluation Was Conducted

Address [number, street, apartment (if applicable)]		City	County	Zip Code
Construction date (year) of structure	Type of structure <input type="checkbox"/> Multi-unit building <input type="checkbox"/> School or daycare <input type="checkbox"/> Single family dwelling <input type="checkbox"/> Other _____		Children living in structure? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Don't Know	

Section 4 – Owner of Structure (if business/agency, list contact person)

Name		Telephone number		
Address [number, street, apartment (if applicable)]		City	State	Zip Code

Section 5 – Results of Lead Hazard Evaluation (check all that apply)

No lead-based paint detected
 Intact lead-based paint detected
 Deteriorated lead-based paint detected
 No lead hazards detected
 Lead-contaminated dust found
 Lead-contaminated soil found
 Other _____

Section 6 – Individual Conducting Lead Hazard Evaluation

Name		Telephone number		
Address [number, street, apartment (if applicable)]		City	State	Zip Code
CDPH certification number	Signature			Date

Name and CDPH certification number of any other individuals conducting sampling or testing (if applicable)

Section 7 – Attachments

- A. A foundation diagram or sketch of the structure indicating the specific locations of each lead hazard or presence of lead-based paint;
- B. Each testing method, device, and sampling procedure used;
- C. All data collected, including quality control data, laboratory results, including laboratory name, address, and phone number.

First copy and attachments retained by inspector
 Second copy and attachments retained by owner

Third copy only (no attachments) mailed or faxed to:
 California Department of Public Health
 Childhood Lead Poisoning Prevention Branch Reports
 850 Marina Bay Parkway, Building P, Third Floor
 Richmond, CA 94804-6403
 Fax: (510) 620-5656

Appendix D

FACS Personnel Certifications



State of California
Division of Occupational Safety and Health
Certified Site Surveillance Technician

Anthony T Aguilar

Name

Certification No. **19-6525**

Expires on **06/12/22**

This certification was issued by the Division of Occupational Safety and Health as authorized by Sections 7180 et seq. of the Business and Professions Code.





STATE OF CALIFORNIA
DEPARTMENT OF PUBLIC HEALTH



LEAD-RELATED CONSTRUCTION CERTIFICATE

INDIVIDUAL:



Anthony Aguilar

CERTIFICATE TYPE:

Lead Sampling Technician

NUMBER:

LRC-00001334

EXPIRATION DATE:

6/11/2022

Disclaimer: This document alone should not be relied upon to confirm certification status. Compare the individual's photo and name to another valid form of government issued photo identification. Verify the individual's certification status by searching for Lead-Related Construction Professionals at www.cdph.ca.gov/programs/clppb or calling (800) 597-LEAD.

State of California
Division of Occupational Safety and Health
Certified Site Surveillance Technician

Virgilito C. Sevilla

Name



Certification No. ~~19-6720~~

Expires on ~~10/06/21~~

This certification was issued by the Division of Occupational Safety and Health as authorized by Sections 7180 et seq. of the Business and Professions Code.



STATE OF CALIFORNIA
DEPARTMENT OF PUBLIC HEALTH



LEAD-RELATED CONSTRUCTION CERTIFICATE

INDIVIDUAL:



Virgilito Sevilla

CERTIFICATE TYPE:

Lead Sampling Technician

NUMBER:

LRC-00002983

EXPIRATION DATE:

9/12/2021

Disclaimer: This document alone should not be relied upon to confirm certification status. Compare the individual's photo and name to another valid form of government issued photo identification. Verify the individual's certification status by searching for Lead-Related Construction Professionals at www.cdph.ca.gov/programs/clppb or calling (800) 597-LEAD.

DEPARTMENT OF INDUSTRIAL RELATIONS
Division of Occupational Safety and Health
Asbestos Certification & Training Unit

1750 Howe Avenue, Suite 460

Sacramento, CA 95825

(916) 574-2993 Office <http://www.dir.ca.gov/dosh/asbestos.html> acru@dir.ca.gov

805042382C

163

April 07, 2021

Martin G Alvarez
344 Egret Place
Pittsburg CA 94565

Dear Certified Asbestos Consultant or Technician:

Enclosed is your certification card. **To maintain your certification, you must abide by the rules printed on the back of the certification card.**

Your certification is valid for a period of one year. If you wish to renew your certification, you must apply for renewal at least 60 days before the expiration date shown on your card. [8 CCR 341.15(h)(1)].

Please hold and do not send copies of your required AHERA refresher renewal certificates to our office until you apply for renewal of your certification.

Certificates must be kept current if you are actively working as a CAC or CSST. The grace period is only for those who are not actively working as an asbestos consultant or site surveillance technician.

Please notify our office via U.S. Postal Service or other carrier of any changes in your mailing or work address within 15 days of the change.

Sincerely,

Jeff Ferrell
Senior Safety Engineer

Attachment: Certification Card

cc: File

Renewal – Card Attached (Revised 06/2020)





STATE OF CALIFORNIA
DEPARTMENT OF PUBLIC HEALTH



LEAD-RELATED CONSTRUCTION CERTIFICATE

INDIVIDUAL:



Martin Alvarez

CERTIFICATE TYPE:

Lead Inspector/Assessor
Lead Project Monitor

NUMBER:

LRC-00001062
LRC-00001061

EXPIRATION DATE:

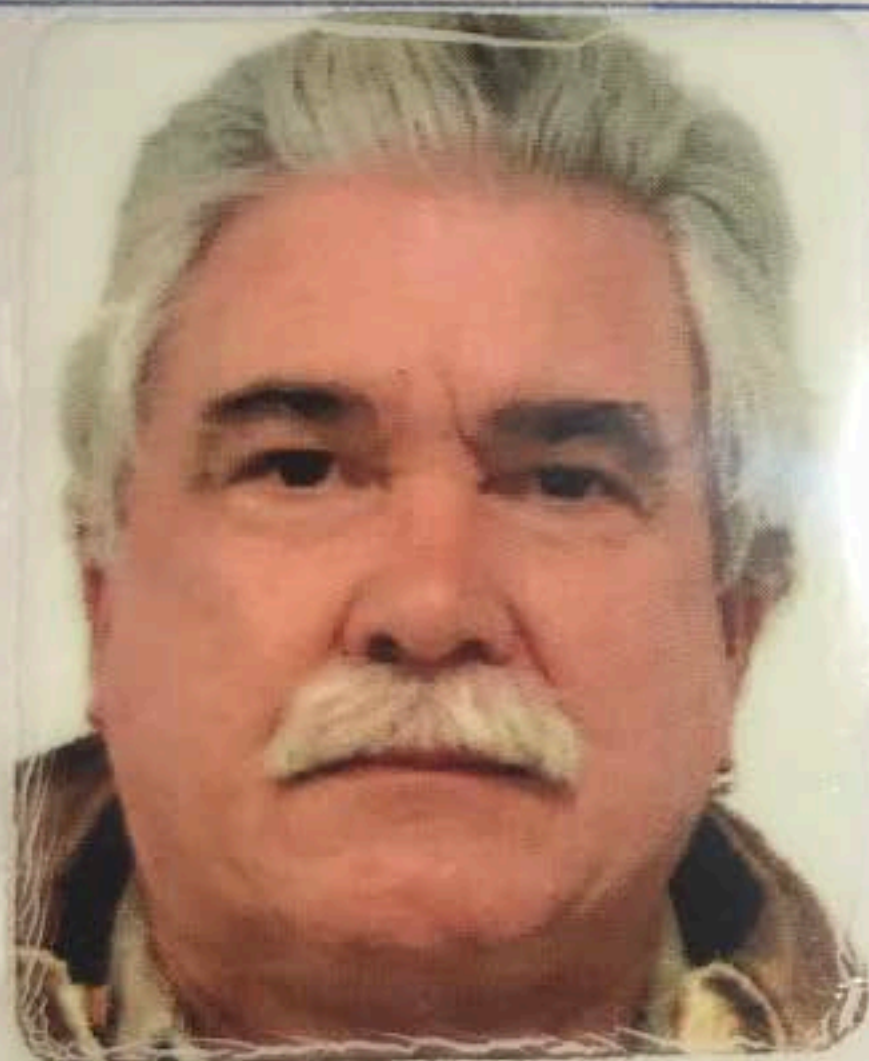
7/22/2021
7/22/2021

Disclaimer: This document alone should not be relied upon to confirm certification status. Compare the individual's photo and name to another valid form of government issued photo identification. Verify the individual's certification status by searching for Lead-Related Construction Professionals at www.cdph.ca.gov/programs/clppb or calling (800) 597-LEAD.

State of California
Division of Occupational Safety and Health
Certified Asbestos Consultant

Peter J Radzinski

Name



Certification No. **15-5571**

Expires on **02/17/22**

This certification was issued by the Division of Occupational Safety and Health as authorized by Sections 7180 et seq. of the Business and Professions Code.

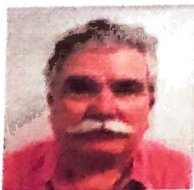


STATE OF CALIFORNIA
DEPARTMENT OF PUBLIC HEALTH



LEAD-RELATED CONSTRUCTION CERTIFICATE

INDIVIDUAL:



Peter Radzinski

CERTIFICATE TYPE:

Lead Project Monitor
Lead Sampling Technician

NUMBER:

LRC-00002185
LRC-00002184

EXPIRATION DATE:

8/7/2022
8/7/2022

Disclaimer: This document alone should not be relied upon to confirm certification status. Compare the individual's photo and name to another valid form of government issued photo identification. Verify the individual's certification status by searching for Lead-Related Construction Professionals at www.cdph.ca.gov/programs/clppb or calling (800) 597-LEAD.



STATE OF CALIFORNIA
DEPARTMENT OF PUBLIC HEALTH



LEAD-RELATED CONSTRUCTION CERTIFICATE

INDIVIDUAL:



Gary Lowe

CERTIFICATE TYPE:

Lead Inspector/Assessor
Lead Project Monitor

NUMBER:

LRC-00003464
LRC-00003463

EXPIRATION DATE:

12/7/2021
12/7/2021

Disclaimer: This document alone should not be relied upon to confirm certification status. Compare the individual's photo and name to another valid form of government issued photo identification. Verify the individual's certification status by searching for Lead-Related Construction Professionals at www.cdph.ca.gov/programs/clppb or calling (800) 597-LEAD.

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Right Perspective
Right Now**

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**SECTION 02 83 00
CONTRA COSTA COMMUNITY COLLEGE DISTRICT
INC. 3: PS&B DEMO & ABATEMENT
LEAD-RELATED CONSTRUCTION
PROJECT NO. C-4016**

PART 1 - GENERAL

The following section has been developed based due to the presence of lead-containing paint at the buildings scheduled for demolition at the Contra Costa College at 2600 Mission Bell Drive, San Pablo, California. Forensic Analytical Consulting Services (FACS) conducted a survey of suspect lead-containing paints at the project buildings, which included the Chemical Storage Building, Biological Science Building, Boiler Room Building, Physical Science Building North, Physical Science Building South and Chiller Unit.

The findings of the survey are presented in the Pre-Demolition Survey Report by FACS dated July 30, 2021, which is attached to these specifications.

1.01 SECTION CONTENTS

- A. This section specifies the methods, procedures, and requirements related to the removal and disposal of lead-containing paint including, but not limited to:
 - 1. Regulatory requirements
 - 2. Submittals
 - 3. Personal protective measures
 - 4. Execution
 - 5. Inspections
 - 6. Waste handling and disposal

1.02 SCOPE OF WORK

- A. This section applies to the project buildings in which lead paint will be disturbed by the planned building demolition. If additional suspect materials are discovered, the Contractor shall treat those materials as

lead-containing unless testing proves otherwise. The Contractor will be responsible for complying with this section in the handling and disposal of lead-containing paint.

- B. In accordance with all drawings, specifications and instructions, Contractor shall furnish all labor, transportation, materials, supervision, equipment, insurance, taxes, overhead and all other items of expense, or services necessary for the removal and disposal of building components coated with lead-containing paint.
- C. The work of the Contract can be summarized as follows:
 - 1. Remove the lead-coated building components identified in the Pre-Demolition Survey Report in support of the planned building demolition.
 - 2. Removal of lead-containing components shall follow the requirements as indicated in these specifications, including and not limited to submittals, training, work practice, and air monitoring.
- D. Before submitting a proposal, bidding contractors should carefully examine the drawing(s) and specifications, visit the site(s), fully inform themselves as to all existing conditions, and limitations and shall include in the proposal a sum to cover the cost of all items included in the Contract. It shall be the responsibility of the Contractor to examine the sites, to measure materials containing lead-containing coatings, to be familiar with these plans and specifications for the work contemplated, and to thoroughly acquaint himself with the physical conditions to be encountered. Should the Contractor find discrepancies in or omissions from the drawings or Contract documents, or should clarification be needed, the Contractor shall notify the Owner who may send written instructions to all bidders.

1.03 POTENTIAL LEAD HAZARD

- A. The disturbance of building components with lead-containing paint may cause lead contaminated dust to be released into the environment, thereby creating a potential health hazard to workers and occupants. Ingestion or inhalation of lead contaminated dust can cause various health concerns, including but not limited to nausea, anemia, vomiting, kidney disease, nervous system disorders, and reproductive problems.
- B. All contractors, sub-contractors, consultants, and other occupants in the vicinity of a potential lead hazard should be apprised, by the responsible

parties and applicable warning signs per OSHA requirements cited herein.

- C. Significant lead exposure may result from activities such as demolition of components, scraping, sanding, or grinding lead-based paint, abrasive blasting of surface coatings, welding, torch cutting, or related procedures. Where in performance of the work specified herein, a lead exposure is potential, strict adherence to the measures and procedures of these specifications shall be mandatory.

1.04 REGULATIONS

- A. The Contractor shall comply with the requirements of the following regulations and guidelines governing lead lead-related construction and disposal, as well as other applicable federal, state, and local government regulations. The regulations and/or guidelines listed herein are incorporated by reference.

Code of Federal Regulations (CFR)

- 24 CFR Part 35, Lead-Based Paint Hazards in Federally Owned Housing and Housing Receiving Federal Assistance

- 29 CFR 1926, Construction Standards

- 29 CFR 1926.62, Lead in Construction Standard

- 40 CFR Part 50.12, Ambient Air Quality Standard for Lead

- 40 CFR Parts 261, 262, 263, 265, and 268, Hazardous Waste Management

- 40 CFR Part 745 Subpart D, Lead-Based Paint Hazards

- 40 CFR Part 745 Subpart E, Residential Property Renovation

- 49 CFR Parts 172, 173, 178, 179, Hazardous Material Transportation

California Code of Regulations (CCR)

- Title 17, CCR Division 1, Chapter 8, Accreditation, Certification, and Work Practices for Lead-Based Paint and Lead Hazards

- 8 CCR Division 1, Chapter 4, Subchapter 4, Construction Safety Orders

- 8 CCR 1532.1, Lead in Construction Standard

- 8 CCR 5144, Respiratory Protection

- 22 CCR Division 4 and 4.5, Hazardous Waste

Lead-Based Paint; Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing. U.S. Department of Housing and Urban Development (HUD), June 1995.

1.05 DEFINITIONS

- A. General: Definitions contained in this Section are not necessarily complete but are general to the extent that they are not defined more explicitly elsewhere in the Contract Documents.
1. **Abatement**: means any set of measures designed to reduce or eliminate lead hazards or lead-based paint for public or residential buildings but does not include containment or cleaning.
 2. **Action Level**: An airborne concentration of 30 micrograms per cubic meter (30 $\mu\text{g}/\text{m}^3$) of air as an eight (8) hour time weighted average (TWA) as covered by OSHA regulations 29 CFR 1926.62.
 3. **Air Monitoring**: The process of measuring the lead levels of a specific volume of air.
 4. **Authorized Visitor**: The Owner's representative, testing lab personnel, or a representative of any federal, state and local regulatory or other agency having authority over the project.
 5. **Breathing Zone**: A hemisphere forward of the shoulders with a radius of approximately 6 inches to 9 inches.
 6. **Construction Barrier**: Demarcation of the work area limiting access by unauthorized personnel.
 7. **Disposal Bag**: A 6 mil. thick leak-tight plastic bag used for transporting lead waste from work area to disposal site.
 8. **Elevated Blood Lead Level**: Means a blood lead concentration equal to or greater than twenty-five (25) micrograms per deciliter ($\mu\text{g}/\text{dl}$).
 9. **Encapsulation**: Involves resurfacing or covering surfaces, and sealing or caulking with durable materials, so as to prevent or control chalking, flaking lead-containing substances from becoming part of house dust or accessible to children.

10. **Enclosure:** The construction of an air-tight, impermeable, permanent barrier around lead-containing material to control the release of lead dust into the air.
11. **Filter:** A media component used in respirators to remove solid or liquid particles from the inspired air.
12. **Final Inspection:** Inspection by a qualified inspector, industrial hygienist, or local public health official to determine whether lead-related construction and cleanup are complete.
13. **Hazardous Waste:** As defined in Resource Conservation Recovery Act (RCRA) the term "hazardous waste" means a solid waste, or combination of solid wastes, which because of its quantity, concentration, or physical, chemical, or infectious characteristics may cause, or significantly contribute to an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness; or pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed.
14. **HEPA Filter:** A High Efficiency Particulate Air filter capable of trapping and retaining 99.97% of particles greater than 0.3 microns in diameter.
15. **HEPA Filter Vacuum Collection Equipment** (or vacuum cleaner): High Efficiency Particulate Air (absolute) filtered vacuum collection equipment with a filter system capable of collecting and retaining 99.97% of particles of 0.3 microns in diameter or larger.
16. **High Phosphate Detergent:** Detergent which contains at least 5% tri-sodium phosphate (TSP).
17. **Lead-Based Paint:** Surface coatings with lead concentration greater than 5,000 ppm (0.5%) by weight.
18. **Lead Permissible Exposure Limit (PEL):** The employer shall ensure that no employee is exposed to an airborne concentration of lead in excess of 50 micrograms per cubic meter ($50 \mu\text{g}/\text{m}^3$) of air as an eight (8) hour time weighted average (TWA) as covered by OSHA regulations 29 CFR 1926.62.
19. **Lead-Related Construction:** Any construction, alteration,

painting, demolition, salvage, renovation, repair, or maintenance of any residential, or public building, including preparation and clean-up, that, by using or disturbing lead-containing material or soil, may result in significant exposure of adults or children to lead.

20. **Negative Pressure:** Air pressure lower than surrounding areas, generally caused by exhausting air from a sealed space (work area).
21. **Negative Pressure Respirator:** A respirator in which the air pressure inside the respiratory-inlet covering is positive during exhalation in relation to the air pressure of the outside atmosphere and negative during inhalation in relation to the air pressure of the outside atmosphere. Negative pressure respirators include all powered-air purifying respirators (PAPRs).
22. **Negative Pressure Ventilation System:** A local exhaust system utilizing HEPA filtration capable of maintaining a negative pressure inside the work area and a constant air flow from adjacent areas into the work area and exhausting that air outside the work area.
23. **Owner:** Contra Costa Community College District.
24. **Owner's Representative:** Owner's Representative is responsible for monitoring, inspection, and enforcement of the specifications
25. **Personal Monitoring:** Sampling of lead concentrations within the breathing zone of an employee.
26. **Personal Protective Equipment (PPE):** Means equipment worn to minimize exposure to hazards that cause serious workplace injuries and illnesses. These injuries and illnesses may result from contact with chemical, radiological, physical, electrical, mechanical, or other workplace hazards. Personal protective equipment may include items such as gloves, safety glasses and shoes, earplugs or muffs, hard hats, respirators, or coveralls, vests, and full body suits.
27. **Respirator:** A device designed to protect the wearer from the inhalation of harmful atmospheres.
28. **RCRA:** Resource Conservation and Recovery Act of 1976. RCRA is an amendment to the Solid Waste Disposal Act of 1965. RCRA was amended in 1980 and most recently on November 8, 1984 by

Hazardous and Solid Waste Amendments.

29. **Testing Laboratories:** A "testing laboratory" is an independent entity engaged to perform specific inspections or tests, either at the project site or elsewhere, and to report on, and, if required, to interpret, results of those inspections or tests.
30. **Time Weighted Average (TWA):** The average concentration of a contaminant in air during a specific time period.
31. **Visible Emissions:** Any emissions containing particulate lead material that are visually detectable without the aid of instruments. This does not include condensed uncombined water vapor.
32. **Wet Cleaning:** The process of eliminating lead contamination from building surfaces and objects by using cloth, mops, or other cleaning utensils which have been dampened with high phosphate detergent and afterwards thoroughly decontaminated or disposed of as lead contaminated waste.
33. **Work Area:** The area where lead related work or removal operations are performed which is defined and/or isolated to prevent the spread of lead dust, or debris, and entry by unauthorized personnel.

1.06 SUBMITTALS AND NOTICES

The submittals and notices listed below shall be submitted by the Contractor to the Owner as follows:

- A. **Training:** Submit prior to commencing work two (2) copies of the training documentation for each supervisor and worker who will be on-site for this project. This training shall be in accordance with 29 CFR 1926.62 (OSHA Lead in Construction Standard).
- B. **Medical Monitoring:** Submit prior to commencing work two (2) copies of the medical documentation for each supervisor and worker who will be on-site for this project. Contractor shall submit documentation that all employees engaged in removal activities have had the appropriate medical examinations within the prescribed time periods immediately preceding project start-up. Documentation shall include, but is not limited to, baseline blood lead levels performed in accordance with 29 CFR 1926.62 (OSHA Lead in Construction Standard).

- C. Respiratory Protection: Submit before starting work copy of Respiratory Protection Program which is in compliance with ANSI Z88.2-1980, OSHA 29 CFR 1910 and 1926. Contractor shall submit statement from examining physician that each employee is fit to wear a respirator in accordance with 29 CFR 1910.134 within the last twelve months. Contractor shall also provide documentation showing that all employees have passed respiratory fit tests within the past twelve months.
- D. OSHA Lead Compliance Plan: Submit prior to commencing work a detailed plan of the procedures proposed in order to comply with the requirements of 29 CFR 1926.62. Include in the plan all components required under the standard.
- E. Hazard Communication Program: Submit prior to commencing work a copy of Hazard Communication Program that complies with 29 CFR 1910.1200.
- F. Hazardous Waste Management Plan: Submit before starting work a copy of Hazardous Waste Management plan which complies with federal, state, and local hazardous waste regulations and addresses:
1. Identification of hazardous wastes associated with the work.
 2. Estimated quantities of wastes to be generated and disposed of.
 3. Names and qualifications of each contractor that will be transporting, storing, treating, and disposing of the wastes. Include the facility location and a 24-hour point of contact. Furnish two (2) copies of EPA, state, and local permit applications, permits, and EPA Identification numbers.
 4. Names and qualifications (experience and training) of personnel who will be working on-site with hazardous wastes.
 5. List of waste handling equipment to be used in performing the work, to include cleaning, volume reduction, and transport equipment.
 6. Spill prevention, containment, and cleanup contingency measures to be implemented.
 7. The Contractor shall submit name, address, and telephone number of landfill or landfills and transporter to Owner for approval, prior to

disposal. This includes those landfills used for waste categories determined to be non-hazardous.

G. Waste Disposal Records:

1. A written record of receipts with certified weight for disposal of materials containing lead and lead based paint contaminated items shall be furnished to the Owner within forty-eight (48) hours after disposal has taken place.
2. Provide a schedule showing date, amount, type of material and location disposed of within five (5) working days of disposal.

1.07 OWNER'S REPRESENTATIVE

A. The Owner may authorize a credentialed consultant to provide the following inspection, testing, and monitoring services including, but not limited to:

1. Visual inspections to verify Contractor's compliance with the specifications, as well as applicable regulations, regarding hazard control measures, and related decontamination procedures.
2. Soil lead testing, if deemed necessary, to establish pre-lead-related construction and post lead-related construction soil lead concentrations.
3. Wipe Sampling, if deemed necessary, to determine whether Contractor has successfully completed clean-up and met the project decontamination criteria.
4. Collection and analysis of typical waste streams produced in order to characterize the waste in accordance with existing state and RCRA hazardous waste criteria. The Consultant may conduct sampling to verify Contractor's characterization of the waste stream(s).
5. Interpretation of technical sections of the contract documents, and coordination with Owner and Contractor for enforcement of regulatory and contractual conformance, including stop work issues.

B. The cost of the Owner's Representative will generally be the responsibility

of the Owner except under special circumstances. The Contractor shall be responsible for the cost of the Owner's Representative for additional services performed when:

1. The Contractor's Work Area fails final clearance inspection and/or testing; or
 2. Additional workdays or workday hours (overtime) are required by the Contractor; or
 3. The Contractor exceeds the allowable time frame for completion; or
 4. Additional services associated with response to an uncontrolled, unauthorized release to the environment as a result of the Contractor's performance of the work.
- C. Contractor shall use only workers trained for lead-related work and medically qualified for respirator usage where applicable.

1.08 CONTRACTOR QUALIFICATIONS

- A. General Superintendent: Provide a General Superintendent whenever Contractor's personnel are on site who is experienced in administration and supervision of lead lead-related construction projects including work practices, protective measures for building and personnel, disposal procedures, etc. This person is the Contractor's Representative responsible for compliance with all applicable federal, state and local regulations, particularly those relating to lead-containing materials.

Experience and Training: The General Superintendent and all workers must have completed a course that meets the requirements of the EPA Model Accreditation Plan for Lead Workers/Supervisors. Submit documentation for each employee per Section 1.06.

- B. Contractor shall use only workers medically qualified and trained for lead work and respirator usage.
1. The minimum acceptable training course duration is thirty-two (32) hours for each worker, as specified in the EPA Model Accreditation Plan. This training shall also comply with 8 CCR 1532.1 (Cal-OSHA's "Lead in Construction Standard").
 2. Contractor shall submit documentation that all employees engaged in removal activities have had the appropriate medical

examinations within the prescribed time periods immediately preceding project start-up. Documentation shall include, but is not limited to, baseline blood lead levels performed in accordance with 8 CCR 1532.1 (Cal-OSHA's "Lead in Construction Standard").

3. Contractor shall submit statement from examining physician that each employee is fit to wear a respirator in accordance with 8 CCR 1532.1 (Cal-OSHA's "Lead in Construction Standard") within the last twelve months.
 4. Documentation that all employees have passed respiratory fit tests within the past twelve months.
 5. The Contractor will provide a copy of their lead compliance program specific for this project, as specified in 8 CCR 1532.1 and indicated in Section 1.06 -- Submittals, above.
- C. Contractor shall provide at least one EPA Certified Renovator.
1. The EPA Certified Renovator must have successfully completed the 8-hour EPA-approved training course from an EPA-accredited training provider.
 2. The EPA Certified Renovator will perform and direct lead-safe work practices onsite, provide on-the-job training to non-certified workers, and implement the Cleaning Verification procedure.

PART 2 - PRODUCTS

2.01 PROTECTIVE COVERING

- A. Polyethylene sheets, of 6 mil thickness, in dimensions of adequate width to minimize frequency of joints.

2.02 TAPE

- A. Duct tape, two inches or wider, capable of sealing joints of adjacent sheets of plastic sheeting or for attachment of plastic sheeting to finished or unfinished surfaces.

2.03 CLEANERS

- A. Wet wiping for decontamination shall be accomplished with a cleaning agent/detergent wash solution. A cleaning agent specifically formulated to clean up lead dust is recommended.

2.04 DISPOSAL CONTAINERS

- A. Provide 6-mil thick polyethylene sheeting, 6-mil leak-tight polyethylene bags and other impervious containers as required by applicable regulations. All waste shall be labeled as potentially hazardous waste unless proven otherwise by appropriate sampling and laboratory analysis.
- B. All hazardous waste shipping containers shall meet applicable DOT requirements.

2.05 WARNING SIGNS AND LABELS

- A. Caution signs in accordance with 8 CCR 1532.2 are to be a minimum of 14 x 20 inches and include phrase "CAUTION - LEAD HAZARD - KEEP OUT UNLESS AUTHORIZED" in lettering at least 2" in height. These signs shall be posted at each approach to the work area.
- B. Cal-OSHA Lead Warning Posters: "WARNING -- LEAD WORK AREA-- NO SMOKING OR EATING" shall be posted at the entrance to each work area.
- C. Hazardous waste labels in accordance with federal, state and local regulations, including, but not limited to the California Code of Regulations, Title 22 Chapter 30 and the U.S. Department of Transportation 49 CFR Parts 172, 173, 178 and 179.

2.06 PERSONAL PROTECTIVE EQUIPMENT

- A. Workers shall wear full body disposable Tyvek-type suits with hoods and separate booties, tape around ankles, wrists, under arms and neck. Suits will be worn inside the work area after the area passes pre-lead-related construction inspection and shall remain in use until the area passes final clearance inspection.
- B. Goggles with side shields will be worn when working with a material that may splash or fragment, or if protective eye wear is specified on the Safety Data Sheets (SDS) for that product.

- C. In addition, all OSHA requirements, such as hard hats, hearing protection, etc. are required.
- D. Additional respiratory protection by supplemental filters, such as organic vapor cartridges, may be needed when handling some coating products. Consult the SDS and obtain the proper filters as necessary. The following guideline indicates types of respirators appropriate for adequate protection against varying lead exposures:

**RESPIRATORY PROTECTION FACTORS
ASSOCIATED WITH LEAD EXPOSURE OPERATIONS**

Respirator Type	Protection Factor	Airborne Concentration of Lead
Air purifying, negative pressure respirator, half-face, HEPA filter	10	Not in excess of 500 µg/m ³
Air purifying, negative pressure respirator, full-face, HEPA filter	50	Not in excess of 2,500 µg/m ³
Type C supplied air positive pressure respirator continuous flow mode half-face	1000	Not in excess of 50,000 µg/m ³
Type C supplied air positive pressure respirator pressure demand mode full facepiece	2000	Not in excess of 100,000 µg/m ³
Type C supplied air positive pressure respirator pressure demand mode full facepiece, equipped with auxiliary positive pressure self contained breathing apparatus (SCBA)	over 2000	Greater than 100,000 µg/m ³
Self contained breathing apparatus (SCBA) positive pressure demand mode full facepiece	over 2000	Greater than 100,000 µg/m ³

2.07 TOOLS AND EQUIPMENT

- A. Provide suitable tools for the decontamination and removal of lead-containing paint including required HEPA vacuums and exhaust units, airless sprayers, ground fault interrupters, hand tools, wipes, ladders, and scaffolds.
- B. Mechanical abrasion tools shall be equipped with local HEPA exhaust and subject to approval by the Owner's Representative.
- C. All tools and equipment brought on site shall be clean and free of contamination from lead and other hazardous materials.
- D. HEPA filtered equipment shall be labeled with a warning label and dedicated to lead-based paint work to prevent combining hazardous wastes of differing characteristics.
- E. Provide adequate support equipment, including, but not limited to lumber, hardware, handwashing facilities, sprayers, hoses, miscellaneous collection devices, and secured holding facilities.
- F. It is the responsibility of the Contractor to negotiate with the Owner for the use of utilities and to provide transportation of the utilities for construction purposes, including but not limited to, water, electrical power, gas, telephone and sanitary facilities. The Contractor shall pay all costs associated in securing such utilities.
- G. The Contractor shall also supply electrical power to the perimeter of containments and/or restricted areas, as necessary, for area air sampling.

PART 3 - EXECUTION

3.01 GENERAL

- A. The purpose of the Lead in Construction Standard is to provide protection to workers exposed to lead in construction equivalent to that afforded other lead workers under OSHA's general industry standard.
- B. The final lead standard for the construction industry applies to all occupational exposure to lead in all construction work in which lead, in any amount, is present in an occupationally related context.
- C. Removal of components identified to contain lead paint shall be performed in accordance with the following work practices.

3.02 WORKER SAFETY/DECONTAMINATION PROCEDURES

- A. The contractor shall employ only workers medically qualified and trained for lead work and respirator usage.
1. Medically qualified shall mean that the worker has had an occupational medical exam for lead exposure and respirator use within the last 12 months, in accordance with 29 CFR 1926.62, and shall have had a blood lead test within the last 6 months.
 2. Each lead-related construction worker shall have completed formal documented training in lead hazards and lead lead-related construction methods in accordance with 1532.1.
 3. The Contractor's superintendent (Competent Person) and all workers shall have received formal training in lead hazards and lead-related construction methods.
 4. The Contractor shall assure that no worker is permitted to perform lead lead-related construction work until the Owner's Representative has received and approved all of that worker's medical, training, and respirator fit test certifications.
- B. The Contractor shall perform an initial exposure assessment in accordance with 8 CCR 1532.1. This includes, but is not limited to, collecting personal air samples to determine the employees' actual exposure to lead dust during construction activities. Personal samples will be collected by the contractor pursuant to OSHA regulations. Each task performed will be monitored at a flow rate of 1-4 liters per minute on MCE 37mm 0.8 μm pore size cassettes. A minimum of one lab blank will be submitted with each set of samples.
- C. Each worker, upon entering the job location, shall proceed to the designated clean room/area and don, at a minimum, a half-mask, negative pressure respirator equipped with HEPA filters, and disposable, full body, Tyvek-type suit, before entering the Work Area. The above PPE must be worn during all phases of the component removal process. **This PPE must be worn for the duration of this project, or until the exposure assessment indicates that exposure to lead dust during these activities will not exceed the action level (30 $\mu\text{g}/\text{m}^3$).**
- D. Prior to component removal, Contractor shall post lead warning signs at all entrances to the Work Area. These lead warning signs shall be in

compliance with the Cal-OSHA "Lead in Construction Standard" (8 CCR 1532.1).

- E. All disposable clothing worn in each work shift shall be removed prior to exiting the Work Area and shall be properly segregated and placed in containers for non-hazardous disposal.
- F. All tools and equipment shall be decontaminated by HEPA vacuuming and/or wet wiping prior to being taken out of the Work Area.
- G. Workers shall not eat, drink, smoke, or chew gum or tobacco at the work site.
- H. Each worker shall have a final medical blood lead laboratory test within one week of job completion and before engaging in other lead related work.

3.03 GENERAL REMOVAL PROCEDURES

- A. Removal of building components with lead paint shall follow the procedures outlined below:
 - 1. Establish the lead removal Work Area by cordoning off (with caution tape or other physical barriers) at the Work Area boundaries to regulate access. Boundaries of the Work Area should be at a minimum 15 feet from the lead-related construction activities.
 - 2. Lay down two (2) layers of 6 mil polyethylene sheeting on the floor at areas of lead component removal. Polyethylene sheeting should cover sufficient area to capture debris generated by the activities.
 - 3. Post warning signs as stated in Section 3.02.
 - 4. Designate a clean room/area near the entrance to the Work Area for donning PPE and changing into street clothes.
 - 5. Don appropriate PPE as stated in Section 3.02.
 - 6. Mist area of lead component removal with water to minimize dust release. Ensure sufficient water is applied so that the component removal activities do not result in visible emissions.
 - 7. Performance of hot work and use of powered abrasive and cutting tools on lead-painted surfaces are prohibited unless approved by Owner and Owner's Representative.

8. If paint chips/dust, etc. are created, clean area using HEPA vacuum and cleaning agent/detergent solution. Clean bottom layer of poly sheeting with cleaning solution or place sheeting in waste bags for waste characterization.
9. Lead-containing wastes shall be placed in a secured area or containers until waste characterization is performed.
10. Effort should be made to segregate waste of different lead concentrations to facilitate disposal as stated in Section 3.05 and 3.06 below.

3.04 INSPECTION PROCEDURE/WORK AREA CLEARANCE

- A. The Owner may retain the services of a CDPH Certified Lead Inspector (Owner's Representative) to inspect the job site and the lead-related construction activities to ensure compliance with these specifications.
- B. The Owner's Representative may collect perimeter air samples around the Work Area to evaluate the Contractor's work practices.
- C. The Owner's Representative may collect soil samples, if deemed necessary, around or at the Work Area to determine if contamination of the job site is present.
- D. The Contractor shall be released only after all Work Areas have been cleared to the satisfaction of the Owner or the Owner's Representative.

3.05 WASTE STORAGE AND CHARACTERIZATION

- A. The Contractor shall provide for secure on-site storage of Lead-Based Paint (LBP) related waste. The waste storage containers shall be located at an Owner-approved area. Waste storage location, equipment, containers and methods shall be in compliance with the requirements of 40 CFR 261, 262, 263 and 265 and are subject to prior approval by Owner and/or Owner's Representative.
- B. Construction materials removed from each Work Area must be evaluated by the Contractor to determine waste characteristics prior to disposal.
- C. Removed intact lead coated components shall be properly segregated, wrapped in 6 mil polyethylene sheeting, labeled and securely sealed with duct tape.

- D. LBP related waste (chips, dust, etc.) produced shall be placed in properly segregated, labeled and sealed containers.
- E. All waste containers and packaged waste shall be stored in a designated, secure waste storage area and labeled "PENDING ANALYSIS" with the following information:
 - 1. Waste Category (Chip/Dust and Removed Components)
 - 2. Date Accumulated
 - 3. Name and Address of Owner
 - 4. Origin of Waste
- F. All waste shall be considered hazardous until waste characterization has been performed under the California Code of Regulations, Title 22, including using one or more of the following testing procedures:
 - 1. Total Threshold Limit Concentration (TTLC)
 - 2. Waste Extraction Test (WET)
 - 3. Toxicity Characteristic Leaching Procedure (TCLP)
- G. All waste shall remain stored in secured waste storage areas until results of waste characterization are available. Due to analytical methods of these tests, this may require storage for up to seven working days. Based on the testing protocols, any waste containing greater than or equal to 5 ppm lead using WET or TCLP tests or any waste containing greater than or equal to 1000 ppm using the TTLC test shall be considered a hazardous waste.
- H. The Contractor shall be responsible for collecting a minimum of four (4) representative samples from each category of waste generated.
- I. The Contractor will be responsible for all costs associated with characterization of waste.

3.06 WASTE DISPOSAL

- A. The Contractor is responsible for all costs associated with transportation, characterization and disposal of all waste, hazardous and non-hazardous..
- B. The Contractor shall submit name, address, and telephone number of landfill or landfills and transporter to Owner for approval, prior to disposal.

- C. The Contractor shall arrange for all lead waste to be transported from the site in accordance with the requirements of 40 CFR 263 and 264, and disposed of properly in accordance with 40 CFR 268, 49 CFR Parts 172, 173, 178, and 179 and California Code of Regulations Title 22.
- D. The Contractor shall prepare hazardous waste shipping manifests for review by the Owner. All hazardous waste manifests shall be signed by the Owner and copies retained by the Owner.
- E. Copies of the landfill weight tickets shall be provided to the Owner immediately upon receipt in order to verify the amount of waste disposed of at the site.

3.07 STOP WORK ORDERS

- A. The Owner and/or Owner's Representative has the authority to stop work if it is determined that conditions or procedures are not in compliance with these specifications and/or applicable regulations; the Contractor is deficient in providing required submittals; the waste is not securely stored; or a potential release of lead dust to outside the Work Area is imminent based on the Owner and/or Owner's Representative's judgment.
- B. The work stoppage shall remain in effect until conditions have been corrected and corrective measures have been taken to the satisfaction of the Owner and/or Owner's Representative.

END OF SECTION

Appendix 1: Pre-Demolition Survey Report



July 30, 2021

Pre-Demolition Survey Report

Asbestos and Lead Survey Report

**C-4016 Increment 3: Physical
Sciences & Biology Buildings
Demolition Project
2600 Mission Bell Drive
San Pablo, California 94806**

Contract No. B0010039

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Appendix A: Results Summary Tables and Laboratory Analytical Reports

Appendix B: Sample Location Diagram

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Appendix D: FACS Personnel Certifications



Executive Summary

Forensic Analytical Consulting Services, Inc. (FACS) was retained by Contra Costa Community College District (District) to perform a pre-demolition asbestos, lead, and polychlorinated biphenyls (PCB) survey of six (6) structures located on the Contra Costa Community College campus at 2600 Mission Bell Drive, in San Pablo, California. The six structures include the Chemical Storage Building, Biological Science Building, Boiler Room Building, Physical Science Building North, Physical Science Building South and Chiller Unit.

This survey was limited to suspect asbestos-, lead-, and PCB-containing materials that will be disturbed during the demolition of the buildings. The survey was performed between May 24, 2021 and July 2, 2021. This report presents the findings of the pre-demolition asbestos and lead survey and includes a summary of the visual inspection for PCB-containing light ballasts. Suspect PCB-containing bulk samples results will be presented in a different report at a later date.

A list of all suspect asbestos- and lead-containing materials identified and sampled as part of this survey, along with the corresponding analytical result of each sample, is included in Appendix A of this report.

Asbestos-Containing Materials

The following building materials were identified by laboratory analysis to be asbestos-containing:

Description	Building Material Location
Tan Sheet Flooring and Mastic	Biological Science Building
Gypsum Wallboard / Joint Compound	Biological Science Building
12x12 Blue Speck Floor Tile and Mastic	Biological Science Building
TSI Elbow Pipe Fittings	Biological Science Building
Black Chalkboard	Biological Science Building
Black Countertop	Biological Science Building
Orange Peel Wall Tile on Wallboard with Texture Coat and Joint Compound	Biological Science Building
Tank Insulation	Biological Science Building
White HVAC Vibration Dampener	Biological Science Building
Black Mastic on HVAC Coils Drip Pan	Biological Science Building
White Cloth HVAC Gasket	Biological Science Building
HVAC Seam Mastic / Silver Paint	Biological Science Building
Dark Gray Sealant on Generator Exhaust Duct Fan	Biological Science Building
Exterior Stucco	Biological Science Building

Exterior Concrete	Biological Science Building
Exterior Light Gray Caulk	Biological Science Building
Asbestos Cement Exhaust Flue	Biological Science Building
Exterior Concrete	Boiler Room Building
Exterior Sealant	Boiler Room Building
TSI Pipe Runs and Fittings Insulation	Boiler Room Building
12"x12" Brown with White Specks Floor Tile Over Black Mastic	Physical Sciences Building North
12"x12" Blue with White Streaks Floor Tile Over Black Mastic	Physical Sciences Building North
12"x12" Beige with Gray Streaks Floor Tile Over Black Mastic Over Brown Mastic	Physical Sciences Building North
12"x12" Red Floor Tile Over Black Mastic	Physical Sciences Building North
12"x12" Gray with Black Dots Floor Tile Over Black Mastic	Physical Sciences Building North
Gypsum Wallboard / Joint Compound	Physical Sciences Building North
Wall Texture Large Splotch	Physical Sciences Building North
Wall Texture Orange Peel Splotch	Physical Sciences Building North
White Sink Undercoat	Physical Sciences Building North
Black Lab Table	Physical Sciences Building North
Black Window Caulking	Physical Sciences Building North
9"x9 Tan with Brown Streaks Floor Tile Over Black Mastic	Physical Sciences Building South
12"x12" Beige with Dark Gray and White Floor Tiles over Black Mastic	Physical Sciences Building South
12"x12" Dark gray with White Streaks Floor Tiles over Black Mastic	Physical Sciences Building South
12"x12" Red with Black Streaks Floor Tile over Black and Yellow Mastic	Physical Sciences Building South
12"x12" Light Brown with White Streaks Floor Tile over Yellow Mastic	Physical Sciences Building South
Black Exhaust System Tabletop	Physical Sciences Building South
Gray Exhaust System Panel	Physical Sciences Building South
Black Exhaust System Panel	Physical Sciences Building South

White Insulation Packing	Physical Sciences Building South
Gypsum Wallboard / Joint Compound	Physical Sciences Building South
Off White Transite Pipe Fitting	Physical Sciences Building South
Pipe Penetration Tape and Insulation	Physical Sciences Building South
Exhaust Hood	Physical Sciences Building South
White Transite Pipe	Physical Sciences Building South
Pipe Penetration Tape and Insulation	Physical Sciences Building South
Exterior White Window Caulking	Physical Sciences Building South
Exterior Off-White Expansion Joint	Physical Sciences Building South
Exterior Black Caulking	Physical Sciences Building South
Roof Flashing	Physical Sciences Building South
Exterior Gray Sealant	Physical Sciences Building South

Lead-Containing Materials:

The following paints were identified by laboratory analysis to contain detectable amounts of lead:

Description	Lead Content Weight % or PPM	Sample Location
Orange Paint on Gypsum Wallboard	0.33%	Biological Science Building
Beige Paint on Gypsum Wallboard	0.14%	Biological Science Building
Off-White Paint on Plaster	0.38%	Biological Science Building
Black Paint on Metal Beam	0.75%	Biological Science Building
White Paint on Wood Trim	0.035%	Biological Science Building
Blue Paint on Wood	0.037%	Biological Science Building
Off-White Paint on Wood	0.21%	Biological Science Building
Beige Paint on Metal	0.016%	Biological Science Building
Yellow Paint on Metal Support Post	0.037%	Biological Science Building
Red Paint on Metal Pipe Valve	0.022%	Biological Science Building
Gray Paint on Metal Exhaust Flue	180,000 ppm	Biological Science Building
White Paint on Stucco	0.0073%	Biological Science Building
White Paint on Metal	0.023%	Biological Science Building

Description	Lead Content Weight % or PPM	Sample Location
Beige Paint on Metal	2.9%	Biological Science Building
Brown Paint on Metal	0.063%	Biological Science Building
Black Paint on Metal	0.28%	Biological Science Building
White Paint on Wood	0.82%	Biological Science Building
White Paint on Metal	<0.0081%	Biological Science Building
Grey Metal Chiller Component	0.88%	Chiller Unit
Light Orange Paint on Plaster	0.96%	Physical Sciences Building South
Off-White Paint on Plaster	0.10%	Physical Sciences Building South
Orange Paint on Plaster	1.9%	Physical Sciences Building South
Dark Blue Paint on Drywall	0.11%	Physical Sciences Building South
Brown Paint on Metal	0.38%	Physical Sciences Building South
Baby Blue Paint on Metal	0.32%	Physical Sciences Building South
Brown Paint on Plaster	0.26%	Physical Sciences Building South
Black Paint on Glass	0.012%	Physical Sciences Building South
Red Paint on Metal	0.029%	Physical Sciences Building South
Off-White Paint on Metal	0.039%	Physical Sciences Building South
Off-White Paint on Drywall	0.32%	Physical Sciences Building South
Green Paint on Metal Window Frame	5.5%	Physical Sciences Building South
Green Paint on Wood Wall	0.090%	Physical Sciences Building South
Baby Blue Paint on Wood Baseboard	0.57%	Physical Sciences Building South
Brown Paint on Wood Baseboard	0.97%	Physical Sciences Building South
Off-White Paint on Wood Baseboard	0.29%	Physical Sciences Building South
Light Brown Paint on Wood Cabinet	0.013%	Physical Sciences Building South
Dark Blue Paint on Metal Door Frame	0.34%	Physical Sciences Building South
Black Paint on Metal Door	0.11%	Physical Sciences Building South
Orange Paint on Metal HVAC Unit	8.5%	Physical Sciences Building South
Light Orange Paint on Transite Exhaust Hood	0.47%	Physical Sciences Building South
Dark Blue Paint on Transite Exhaust Hood	0.020%	Physical Sciences Building South
Dark Brown Paint on Metal Post	3.2%	Physical Sciences Building South
White Paint on Stucco Wall	0.19%	Physical Sciences Building South
Brown Paint on Metal Door	2.5%	Physical Sciences Building South

Description	Lead Content Weight % or PPM	Sample Location
Blue Paint on Metal Post	0.008%	Physical Sciences Building South
Pink Paint on Concrete Wall	0.11%	Boiler Room Building
Brick Red Paint on Metal Door	1.4%	Boiler Room Building
Brick Red Paint on Metal Pipe	1.2%	Boiler Room Building
Ferrari Red Paint on Metal Pipe Flange	0.078%	Boiler Room Building
Yellow Paint on Metal Pipe	0.019%	Boiler Room Building
Blue Paint on Thermal System Insulation	0.18%	Boiler Room Building
Blue Paint on Metal Door Frame	1.4%	Boiler Room Building
Gray Paint on Pipe	0.007%	Boiler Room Building
Gray Paint on Pedestal	0.19%	Boiler Room Building
Gray Paint on Metal Handrail	0.089%	Physical Sciences Building North
Red Paint on Metal Duct	0.032%	Physical Sciences Building North
Black Paint on Metal Door Frame	0.32%	Physical Sciences Building North
White Paint on Metal Door Frame	0.032%	Physical Sciences Building North
Yellow Paint on Metal Fixture	1.9%	Physical Sciences Building North
Brown Paint on Metal Door Frame	0.20%	Physical Sciences Building North
Red Ceramic Wall Tile	0.008%	Physical Sciences Building North
Yellow Paint on Drywall	0.034%	Physical Sciences Building North
Red Paint on Metal Beam	0.028%	Physical Sciences Building North
Brown Paint on Metal Rail	0.12%	Physical Sciences Building North
Black Paint on Metal Door	0.018%	Physical Sciences Building North

PCB-Containing Light Ballasts and Fluorescent Light Tubes:

Three hundred sixty-five (365) suspect PCB-containing ballasts and seven hundred twenty-five (725) fluorescent light tubes were identified within the buildings.

FACS recommends that the results of this report be incorporated into the demolition plans for the building. In addition, the removal of any of the above-referenced materials should be conducted by an appropriately California licensed and registered contractor. A more complete discussion of findings, conclusions, and recommendations is provided below.

Introduction

Contra Costa Community College District retained FACS to perform a pre-demolition survey for asbestos-, lead-, and PCB-containing materials for the commercial building located at the above-referenced address. Sampling was performed between May 24, and July 2, 2021. This report presents

the findings of the pre-demolition asbestos and lead survey and includes a summary of the visual inspection for PCB-containing light ballasts.

Site Characterization

The Survey includes six (6) structures located on Contra Costa College Campus, 2600 Mission Bell Drive, San Pablo, California. The six structures include the Chemical Storage Building, Biological Science Building, Boiler Room Building, Physical Science Building North, Physical Science Building South, and Chiller Unit. The structures are in the northeast section of the campus. Demolition is planned for all six (6) structures.

The Physical Science Building North and Physical Science Building South are attached and known collectively as the Physical Science Building. Both building have different entrances and the Physical Science Building North has a later construction date. For the purpose of this survey, we have defined the Physical Science Building as two separate buildings. Both buildings and the Biological Science Building are currently in use as classroom buildings.

The Boiler Room Building, Chemical Storage Building, and Chiller Unit are currently in use as support services to the Physical Science Building and Biological Science Building. These structures are not accessible to students and the general public.

Scope of Work

Asbestos

The asbestos survey was conducted by personnel accredited as asbestos inspectors under the federal Environmental Protection Agency (EPA) Asbestos Hazard Emergency Response Act (AHERA) and certified by the California Division of Industrial Relations, Department of Occupational Safety and Health (Cal/OSHA) as an Asbestos Consultant (CAC) and a Site Surveillance Technician (SST). FACS representatives Martin Alvarez, Peter Radzinski, Certified Asbestos Consultants (CAC# 98-2382 and 15-5571), Anthony Aguilar, and Jim Sevilla, Site Surveillance Technicians (SST# 19-6525 and 19-6720), conducted the asbestos survey. FACS employee certifications are included in Appendix D.

The scope of the survey and the services provided by FACS included:

- Performing a visual inspection of the buildings to identify accessible suspect asbestos-containing building materials (ACBMs);
- Collecting and analyzing bulk samples of suspect building materials for asbestos content;
- Ensuring the technical quality of all work by using Asbestos Hazard Emergency Response Act (AHERA) accredited Inspectors and Management Planners and Cal/OSHA certified asbestos personnel;
- Consolidating data and findings into a report format.

Materials to be disturbed by the project and suspected of containing asbestos were sampled in accordance with the federal EPA AHERA protocols. Suspect materials were grouped and classified as homogeneous materials based on their color, texture, and time of construction (i.e., similar appearing materials in different construction phases of a building are classified as separate materials). For any suspect materials determined to be impacted by the project, samples representative of the materials were collected. Materials determined by the inspector to be non-suspect, such as wood, metal, glass, and fiberglass insulation, were not sampled.

Samples were collected in such a manner as to minimize release of the material into the surroundings. Material type, sample number, sample location, and other pertinent information were recorded at the time of

sampling. Each sample was placed in an airtight container labeled with a unique sample number and submitted to SGS Forensic Laboratories (SGS), in Hayward California and Micro Analytical Laboratories, Inc. (MAL) in Emeryville, California for analysis. Samples were analyzed in accordance with EPA Method 600/R-93-116, using polarized light microscopy (PLM) with dispersion staining and using visual area estimation to determine percent asbestos content. This method allows for the identification of the primary types of asbestos used in building materials. The lower limit of detection for this method is one percent. Samples containing less than one-percent asbestos by this PLM method are reported as Trace.

Lead

The lead survey was conducted by personnel certified for lead-related construction consulting work by the California Department of Public Health (CDPH). FACS representatives Martin Alvarez, a CDPH Certified Inspector Assessor (LRC-00001062), Peter Radzinski, Anthony Aguilar, and Miguel Coyotl, CDPH Certified Sampling Technicians (LRC-00002184, LRC-00001334 and LRC-00002983), conducted the lead survey.

The lead survey was limited to prevalent and predominant paints within the interior and exterior of the buildings. The purpose of the lead testing was to provide information to assist the contractor in compliance with various regulatory requirements during the demolition. Since this paint chip survey sampled only representative components and not every individual component, the lead results are assumed to be the same on like components in the same general area of the representative component that was sampled.

All of the suspect lead paint samples were analyzed by MAL and SGS using atomic absorption spectrometry (Flame AAS) in accordance with EPA SW-846 Method 7420 and 3050B/7000B. The detection limit is determined by factors including the size and matrix of each individual sample.

Paint containing lead greater than 0.5% lead by weight (or 5,000 ppm) is considered lead-based paint by CDPH and the EPA, which regulate the disturbance of lead-based paint. Paint with any detectable level of lead is considered lead-containing paint by Cal/OSHA and is regulated under Title 8 California Code of Regulations (CCR) Section 1532.1, Lead in Construction Standard.

PCB-Containing Light Ballasts

California DTSC and the U.S. EPA regulate the use, handling, and disposal of polychlorinated biphenyls (PCBs). PCBs were used in the manufacture of a variety of electrical equipment and components. Until the late 1970s, fluorescent light fixture ballasts often contained regulated concentrations of PCBs.

In the 1970s federal legislation was enacted that prohibited the manufacture and use of PCBs in general; however, almost all fluorescent light fixture ballasts manufactured through 1979 are assumed to have contained PCBs. Ballasts manufactured after 1979 that did not contain PCBs were required to be labeled "No PCBs" or "PCB-free." Any ballast not containing a label indicating "No PCBs" or "PCB-free" should be assumed to contain regulated quantities of PCBs and handled in accordance with applicable laws and regulations. Disposal of such ballasts must be managed as a hazardous waste.

Beginning in 1979, lighting ballast manufacturers prohibited from using PCBs began substituting the substance Di(2-ethylhexyl)phthalate or DEHP. DEHP-containing fluorescent lighting ballasts were produced until approximately 1991, when dry-type ballasts became the industry standard. Although DEHP is recognized as a hazardous substance, neither the U. S. EPA nor DTSC currently regulates DEHP-containing lighting ballasts as hazardous waste. Free-liquid DEHP, as might result from a leaking or drained ballast, is regulated as a hazardous waste.

During this survey, FACS noted the presence of fluorescent light fixtures throughout the buildings. FACS did not visually inspect the ballasts, but rather documented the presence of such fixtures. Based on the age of construction, the ballasts should be assumed to be PCB-containing. However, any lighting fixture ballasts displaying a label indicating they contain “No PCBs” or are “PCB Free” should be assumed to contain DEHP and be recycled according to applicable state and federal regulations.

Asbestos Survey Methodology

Performing an asbestos survey prior to commencement of any demolition and renovation is regulated by the local air quality district. In the San Francisco Bay Area, an asbestos survey is required regardless of the building’s construction date. This asbestos survey was performed in accordance with the Bay Area Air Quality Management District (BAAQMD) Regulation 11, Rule 2.

BAAQMD and Cal/OSHA recognize material with more than one-percent (1%) asbestos to be asbestos-containing material (ACM). However, Cal/OSHA also requires notification and registration of the contractor when working with materials containing more than one-tenth of one percent (0.1%) asbestos, and requires worker protection and specified work practices whenever materials containing any detectable levels of asbestos are to be disturbed.

Our investigation consisted of the following:

- Visual inspection;
- Collection of samples of suspect ACM using the AHERA Survey protocol;
- Submitting samples to MAL and SGS for analysis by Polarized Light Microscopy (PLM). MAL and SGE are accredited by the American Industrial Hygiene Association (AIHA) and by the NIST National Volunteer Laboratory Accreditation Program (NVLAP) for asbestos sample analysis; and
- Presenting analytical results, conclusions, and recommendations in a report that can be submitted to the BAAQMD.

The suspect ACMs were sampled using a knife or other similar coring device suitable to the type of material sampled to cut through its entire thickness and to ensure that a cross-section of the material was obtained. The sample was then placed in an appropriately labeled container, which was sealed and submitted to the laboratory following appropriate chain-of-custody procedures.

The types, number, and locations of samples were determined based on available information about the subject project provided to FACS, visual observations, regulatory requirements, and other project management considerations.

Lead Survey Methodology

This survey was conducted by paint chip sampling. The paint chip samples were collected using a sharp scraper to remove all layers of paint down to the substrate material, taking care not to include the substrate in the sample. The sample was then placed in an appropriately labeled container, which was sealed and submitted to the laboratory following appropriate chain-of-custody procedures. The detection limit is determined by factors including the size and matrix of each individual sample.

The lead survey was intended to assist the District for compliance with Cal/OSHA worker protection requirements. *The lead survey was not a comprehensive lead-based paint survey as detailed in the "Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing" by The National Center for Lead-Safe Housing for HUD.*

Our investigation consisted of the following:

- Visual inspection;
- Collection of samples of suspect lead-containing paint;
- Submitting samples to MAL and SGS for analysis by atomic absorption spectrometry (Flame AAS) in accordance with EPA SW-846 Method 7420 and 3050B/7000B. MAL and SGS are accredited by the AIHA Environmental Lead Laboratory Accreditation Program (ELLAP) and by the CDPH for lead analysis; and
- Presenting analytical results, conclusions, and recommendations in a report.

The types, number, and locations of samples were determined based on available information about the subject project provided to FACS, visual observations, regulatory requirements, and other project management considerations.

PCB Ballasts Survey Methodology

During this survey, FACS inspected the subject building for the presence of fluorescent light ballasts. The approximate number of ballasts, as well as fluorescent light tubes, are documented and presented in this report.

Asbestos Sampling and Analysis

FACS collected a total of three hundred ninety (390) suspect asbestos bulk samples of one hundred eighty-nine (189) suspect homogeneous materials from the project area. The detailed laboratory report and completed bulk sample request form (chain of custody) are contained in Appendix A. A floor plan identifying the sample locations can be found in Appendix B.

Lead Paint Sampling and Analysis

FACS collected ninety-one (91) paint chip samples and four (4) ceramic tile samples from the project area. The samples were submitted to MAL and SGS for analysis by Flame AAS in accordance with EPA SW-846 Method 7420 and 0350B/7000B. The detailed laboratory report and completed paint sample request form (chain of custody) are contained in Appendix A. A floor plan identifying the sample locations can be found in Appendix B.

Findings and Recommendations

Asbestos Survey Results

The table below presents a summary of the findings for each of the asbestos-containing materials identified in this survey.

Table 1. Asbestos Survey Results C-4016 Increment 3: Physical Sciences & Biology Buildings Demolition Project 2600 Mission Bell Drive San Pablo, California 94806				
Material	Location	Asbestos Content	Estimated Quantity	Regulatory Classification
Tan Sheet Flooring and Mastic	Biological Science Building	Sheet Flooring: ND Mastic: 25% Chrysotile Asbestos	18,380 sf	CAT 1 Non-Friable
Gypsum Wallboard / Joint Compound	Biological Science Building	Drywall: ND Joint Compound: 2% Chrysotile Tape/Paint: ND	41,000 sf	RACM
12x12 White / Blue Speck Floor Tile and Mastic	Biological Science Building	Floor Tile: ND Mastic: 2% Chrysotile Asbestos Debris/Dust: ND	3,100 sf	CAT 1 Non-Friable
TSI Elbow Pipe Fittings	Biological Science Building	5% Chrysotile Asbestos	1,100 ea	RACM
Black Chalkboard	Biological Science Building	20% Amosite Asbestos 5% Chrysotile Asbestos	85 ea	CAT 2 Non-Friable
Black Countertop	Biological Science Building	35% Chrysotile Asbestos	120 ea	CAT 2 Non-Friable
Orange Peel Wall Tile on Wallboard with Texture Coat and Joint Compound	Biological Science Building	Drywall: ND Joint Compound: 3% Chrysotile Asbestos Tape: ND Paint: ND	8,000 sf	RACM
Tank Insulation	Biological Science Building	20% Amosite Asbestos 5% Chrysotile Asbestos	150 sf	RACM
White HVAC Vibration Dampener	Biological Science Building	40% Chrysotile Asbestos	16 ea	RACM
Black Mastic on HVAC Coils Drip Pan	Biological Science Building	15% Chrysotile Asbestos	80 sf	CAT 1 Non-Friable
White Cloth HVAC Gasket	Biological Science Building	80% Chrysotile Asbestos	16 ea	RACM
HVAC Seam Mastic / Silver Paint	Biological Science Building	Mastic: ND Paint (Silver): 8% Chrysotile Asbestos Mesh: ND	70 lf	CAT 1 Non-Friable
Dark Gray Sealant on Generator Exhaust Duct Fan	Biological Science Building	2% Chrysotile Asbestos	5 lf	CAT 1 Non-Friable
Exterior Stucco	Biological Science Building	Stucco: ND Skim Coat: <1% Chrysotile	130 sf	CAT 2 Non-Friable
Exterior Concrete	Biological Science Building	2% Chrysotile Asbestos	20 sf	CAT 2 Non-Friable
Exterior Light Gray Caulk	Biological Science Building	2% Chrysotile Asbestos	5,200 lf	CAT 1 Non-Friable
Asbestos Cement Exhaust Flue	Biological Science Building	Assumed Asbestos Material	20 sf	CAT 2 Non-Friable

Table 1. Asbestos Survey Results C-4016 Increment 3: Physical Sciences & Biology Buildings Demolition Project 2600 Mission Bell Drive San Pablo, California 94806				
Material	Location	Asbestos Content	Estimated Quantity	Regulatory Classification
Exterior Concrete	Boiler Room Building	Trace Chrysotile	200 sf	CAT 2 Non-Friable
Exterior Sealant	Boiler Room Building	Trace Chrysotile	20 sf	CAT 1 Non-Friable
TSI Pipe Runs and Fittings Insulation	Boiler Room Building	3% Chrysotile 10-15% Amosite	900 lf	RACM
12"x12" Brown with White Specks Floor Tile Over Black Mastic	Physical Sciences Building North	Tile: ND Mastic: 5% Chrysotile Asbestos	900 sf	CAT 1 Non-Friable
12"x12" Blue with White Streaks Floor Tile Over Black Mastic	Physical Sciences Building North	Tile: ND Mastic: 5% Chrysotile Asbestos	20 sf	CAT 1 Non-Friable
12"x12" Beige with Gray Streaks Floor Tile Over Black Mastic Over Brown Mastic	Physical Sciences Building North	Tile: ND Mastic: 5% Chrysotile Asbestos	20 sf	CAT 1 Non-Friable
12"x12" Red Floor Tile Over Black Mastic	Physical Sciences Building North	Tile: ND Mastic: 5% Chrysotile Asbestos	20 sf	CAT 1 Non-Friable
12"x12" Gray with Black Dots Floor Tile Over Black Mastic	Physical Sciences Building North	Tile: ND Mastic: 5% Chrysotile Asbestos	20 sf	CAT 1 Non-Friable
Gypsum Wallboard / Joint Compound	Physical Sciences Building North	Wallboard: ND Joint Compound: 2% Chrysotile Asbestos Tape: ND Paint: ND	18,000 sf	RACM
Wall Texture Large Splotch	Physical Sciences Building North	Texture: 2% Chrysotile Asbestos Paint: ND	5,000 sf	RACM
Wall Texture Orange Peel Splotch	Physical Sciences Building North	Texture: 2% Chrysotile Asbestos Paint: ND	100 sf	RACM
White Sink Undercoat	Physical Sciences Building North	Coating: 2% Chrysotile Asbestos	15 sf	CAT 1 Non-Friable
Black Lab Table	Physical Sciences Building North	10% Chrysotile Asbestos	150 sf	CAT 2 Non-Friable
Black Window Caulking	Physical Sciences Building North	2% Chrysotile	150 lf18	CAT 2 Non-Friable
9"x9 Tan with Brown Streaks Floor Tile Over Black Mastic	Physical Sciences Building South	Tile: 5% Chrysotile Mastic: 5% Chrysotile	600 sf	CAT 1 Non-Friable

Table 1. Asbestos Survey Results
C-4016 Increment 3: Physical Sciences & Biology Buildings Demolition Project
 2600 Mission Bell Drive
 San Pablo, California 94806

Material	Location	Asbestos Content	Estimated Quantity	Regulatory Classification
12"x12" Beige with Dark Gray and White Floor Tiles over Black Mastic	Physical Sciences Building South	Tile: ND Mastic: 5% Chrysotile	150 sf	CAT 1 Non-Friable
12"x12" Dark Gray with White Streaks Floor Tiles over Black Mastic	Physical Sciences Building South	Tile: 3% Chrysotile Mastic: 5% Chrysotile	1,760 sf	CAT 1 Non-Friable
12"x12" Red with Black Streaks Floor Tile over Black and Yellow Mastic	Physical Sciences Building South	Tile: ND Mastic: 5% Chrysotile	20sf	CAT 1 Non-Friable
12"x12" Light Brown with White Streaks Floor Tile over Yellow Mastic	Physical Sciences Building South	Tile: 2% Chrysotile Mastic: ND	20 sf	CAT 1 Non-Friable
Black Exhaust System Tabletop	Physical Sciences Building South	10% Chrysotile Asbestos	200 sf	CAT 2 Non-Friable
Gray Exhaust System Panel	Physical Sciences Building South	10% Chrysotile Asbestos	200 sf	CAT 2 Non-Friable
Black Exhaust System Panel	Physical Sciences Building South	10% Chrysotile Asbestos	200 sf	CAT 2 Non-Friable
White Insulation Packing	Physical Sciences Building South	10% Amosite Asbestos 5% Chrysotile Asbestos	50 sf	RACM
Gypsum Wallboard / Joint Compound	Physical Sciences Building South	Drywall: ND Joint Compound: 2% Chrysotile	1,250 sf	RACM
Off White Transite Pipe Fitting	Physical Sciences Building South	10% Chrysotile Asbestos 5% Crocidolite	10 sf	RACM
Pipe Penetration Tape and Insulation	Physical Sciences Building South	10% Amosite 2% Chrysotile	5 lf	RACM
Exhaust Hood	Physical Sciences Building South	10% Chrysotile	600 sf	CAT 2 Non-Friable
White Transite Pipe	Physical Sciences Building South	10% Chrysotile 2% Crocidolite	40 sf	RACM
Pipe Penetration Tape and Insulation	Physical Sciences Building South	10% Chrysotile 2% Crocidolite	20 lf	RACM
Exterior White Window Caulking	Physical Sciences Building South	Trace Chrysotile	100 lf	CAT 2 Non-Friable
Exterior Off-White Expansion Joint	Physical Sciences Building South	5% Chrysotile	150 lf	CAT 1 Non-Friable

Table 1. Asbestos Survey Results C-4016 Increment 3: Physical Sciences & Biology Buildings Demolition Project 2600 Mission Bell Drive San Pablo, California 94806				
Material	Location	Asbestos Content	Estimated Quantity	Regulatory Classification
Exterior Black Caulking	Physical Sciences Building South	5% Chrysotile	1,600 lf	CAT 1 Non-Friable
Roof Flashing	Physical Sciences Building South	40% Chrysotile Asbestos	500 sf	CAT 1 Non-Friable
Exterior Gray Sealant	Physical Sciences Building South	10% Chrysotile	500 lf	CAT 1 Non-Friable
Abbreviations/Acronyms				
ND – No Asbestos Detected				
NA – Not Applicable				
RACM – Regulated Asbestos-Containing Material				
CAT 1 Nonfriable – Category 1 Nonfriable Asbestos-Containing Material				
CAT 2 Nonfriable – Category 2 Nonfriable Asbestos-Containing Material				

Asbestos was detected in the above listed materials collected for this survey:

These results apply to all locations where the materials listed above are present in the project area, not just to the sample locations.

A table summarizing the laboratory analytical results for each of the bulk samples collected and submitted for asbestos analysis can be found in Appendix A of this report. Samples containing less than 10% asbestos (including Trace) must be further analyzed using the point count method to determine asbestos content more accurately or else must be considered >1% asbestos (ACM).

FACS recommends:

1. Develop a specification for removal of ACM prior to disturbance by demolition activities.
2. If other suspect asbestos-containing materials not previously tested are identified/uncovered during demolition activities, those materials must be assumed to contain asbestos or must be sampled accordingly prior to their disturbance.

Lead Survey Results

The table below presents a summary of the lead findings for each of the paints and solder sampled in this survey.

Table 2. Lead Survey Results C-4016 Increment 3: Physical Sciences & Biology Buildings Demolition Project 2600 Mission Bell Drive San Pablo, California 94806		
Material	Lead Content	Location
Biological Science Building		
Orange Paint on Gypsum Wallboard	0.33%	Room 18, Southeast Corner Wall
1"x1" Ceramic Tile Gray with Black Specks	<7.7 ppm	Room 24, Southwest Corner from Countertop
Beige Paint on Gypsum Wallboard	0.14%	Room 26, Southeast Counter
4"x4" Off-White Ceramic Tile	210 ppm	Room 43, Wall

Table 2. Lead Survey Results C-4016 Increment 3: Physical Sciences & Biology Buildings Demolition Project 2600 Mission Bell Drive San Pablo, California 94806		
Material	Lead Content	Location
Off-White Paint on Gypsum Wallboard	<0.0078%	Room 12, Southeast Wall
Off-White Paint on Plaster	0.38%	Room 43, Northeast Corner Wall
Black Paint on Metal Beam	0.75%	Room 33, Center I-Beam
White Paint on Wood Trim	0.035%	Room 37, Corridor Door
Light Blue Paint on Gypsum Wallboard	<0.0081%	Corridor, South End, West Wall
Blue Paint on Wood	0.037%	Corridor, South End, Door 7
Off-White Paint on Wood	0.21%	Room 1, Southwest Adjacent Room to Electrical Beam
Beige Paint on Metal	0.016%	Room 1, Southeast Wall
Blue Paint on Metal	<0.0081	Room 3 Boiler Room, North Side Generator
Yellow Paint on Metal Support Post	0.037%	Room 3 Boiler Room
Red Paint on Metal Pipe Valve	0.022%	Room 3 Boiler Room, South Side
Gray Paint on Concrete	<0.0081%	Room 3 Boiler Room, Floor
Blue Paint on Wood	<0.0081%	Room 3 Boiler Room, South Wall Panel
1"x1" Gray Ceramic Tile	<8.9 ppm	Men's Restroom, Floor
Gray Paint on Metal	180,000 ppm	Roof Exhaust Flue
White Paint on Stucco	0.0073%	Exterior, South Side Soffit
Red Paint on Metal Duct	<0.0079%	Exterior, Southwest Corner, Duct Chase
White Paint on Metal Shade	0.023%	Exterior, West Side, Shade Lower
Beige Paint on Metal Trim	2.9%	Exterior, West Side Wall, Lower Header Trim
Brown Paint on Metal	0.063%	Exterior, Roof, Southwest Corner Parapet Cap
Black Paint on Metal	0.28%	Exterior, West Side I-Beam Column
White Paint on Wood	0.82%	Exterior, West Side Eave Joist
Red Paint on Wood	<0.0081%	Exterior, South Box
White Paint on Metal	<0.0081%	Room 29, Exhaust Hood
Chemical Storage Building		
Grey Paint on Metal Door	<0.007%	Ante-Chamber, Flammables Door
Beige Paint on Wallboard	<0.007%	Ante-Chamber, Wall Between Hazardous and Flammable Storage Doors
Chiller Unit		
Grey Metal Chiller Component	0.88%	Near Entry, Chiller Component

Table 2. Lead Survey Results C-4016 Increment 3: Physical Sciences & Biology Buildings Demolition Project 2600 Mission Bell Drive San Pablo, California 94806		
Material	Lead Content	Location
Physical Sciences Building South		
Baby Blue Paint on Plaster	<0.006%	Physical Sciences Building South, Corridor, South Wall
Light Orange Paint on Plaster	0.96%	Physical Sciences Building South, Room PS-8, West Wall
Off-White Paint on Plaster	0.10%	Physical Sciences Building South, Room PS-17, West Wall
Orange Paint on Plaster	1.9%	Physical Sciences Building South, Room PS-12, South Wall
Dark Blue Paint on Drywall	0.11%	Physical Sciences Building South, Room PS-19, North Wall
Brown Paint on Metal	0.38%	Physical Sciences Building South, Room PS-5, North Wall
Baby Blue Paint on Metal	0.32%	Physical Sciences Building South, Room PS-5, North Wall
Brown Paint on Plaster	0.26%	Physical Sciences Building South, Room PS-2, North Wall
Black Paint on Glass	0.012%	Physical Sciences Building South, Room PS-19, Northwest Wall
Red Paint on Metal	0.029%	Physical Sciences Building South, Room PS-5, Southwest Wall
Off-White Paint on Metal	0.039%	Physical Sciences Building South, Room PS-2, East Wall
Off-White Paint on Drywall	0.32%	Physical Sciences Building South, Room PS-1, South Wall
Green Paint on Metal Window Frame	5.5%	Physical Sciences Building South, Room PS-5, North Wall
Green Paint on Wood Wall	0.090%	Physical Sciences Building South, Room PS-5, North Wall
Baby Blue Paint on Wood Baseboard	0.57%	Physical Sciences Building South, Room PS-6, North Wall
Brown Paint on Wood Baseboard	0.97%	Physical Sciences Building South, Room PS-8, North Wall
Off-White Paint on Wood Baseboard	0.29%	Physical Sciences Building South, Room PS-10, South Wall
Light Brown Paint on Wood Cabinet	0.013%	Physical Sciences Building South, Room PS-6, Cabinet
Dark Blue Paint on Metal Door Frame	0.34%	Physical Sciences Building South, Room PS-19, Room-108
Black Paint on Metal Door	0.11%	Physical Sciences Building South, Room PS-19, Room 108
Orange Paint on Metal HVAC Unit	8.5%	Physical Sciences Building South, Room PS-5, North on Hood

Table 2. Lead Survey Results C-4016 Increment 3: Physical Sciences & Biology Buildings Demolition Project 2600 Mission Bell Drive San Pablo, California 94806		
Material	Lead Content	Location
Light Orange Paint on Transite Exhaust Hood	0.47%	Physical Sciences Building South, Room PS-6, South Side
Dark Blue Paint on Transite Exhaust Hood	0.020%	Physical Sciences Building South, Room PS-14, South Wall
Dark Brown Paint on Metal Post	3.2%	Physical Sciences Building South, Room PS-6, South Wall
White Paint on Stucco Wall	0.19%	Exterior, Physical Sciences Building South, Southeast Area
Brown Paint on Metal Door	2.5%	Exterior, Physical Sciences Building South, North Center Area
Blue Paint on Metal Post	0.008%	Exterior, Physical Sciences Building South, East Center Area
Boiler Room Building		
Pink Paint on Concrete Wall	0.11%	Interior, West Wall, Center
Blue Paint on Metal Transformer	<0.006%	Interior, Transformer Stand, Southwest Corner
Brick Red Paint on Metal Door	1.4%	Interior, Boiler Room, Entry Door, Southwest Area
Brick Red Paint on Metal Pipe	1.2%	Exterior, Boiler Room, Southwest Corner, Pipe
Fire Red Paint on Metal Control Panel	<0.007%	Interior, Boiler Room, South Wall, Control Panel
Ferrari Red Paint on Metal Pipe Flange	0.078%	Interior, Boiler Room, Northwest Corner, Pipe Flange
Yellow Paint on Metal Pipe	0.019%	Interior, Boiler Room, West Wall, Pipe Adjacent to Entry
Blue Paint on Thermal System Insulation	0.18%	Interior, Boiler Room, Southeast Area, Thermal System Insulation on Pipe
Blue Paint on Metal Door Frame	1.4%	Interior, Boiler Room, Northeast Entry, Door Frame
Gray Paint on Pipe	<0.007%	Interior, Boiler Room, Southwest Area Adjacent to Entry
Gray Paint on Pipe	0.007%	Exterior, Boiler Room, Northeast Area, Gas Meter
Gray Paint on Pedestal	0.19%	Interior, Boiler Room, Northeast Area, Pedestal
Physical Sciences Building North		
White Paint on Drywall	<0.007%	Physical Sciences Building North, Room PS-109, West Wall
Gray Paint on Metal Door Frame	<0.006%	Physical Sciences Building North, Room PS-109, Entrance

Table 2. Lead Survey Results C-4016 Increment 3: Physical Sciences & Biology Buildings Demolition Project 2600 Mission Bell Drive San Pablo, California 94806		
Material	Lead Content	Location
Beige Paint on Wood Trim	<0.006%	Physical Sciences Building North, Corridor 1, Above Entrance
Gray Paint on Metal Handrail	0.089%	Physical Sciences Building North, Corridor 1, Center
Red Paint on Metal Duct	0.032%	Physical Sciences Building North, Room PS-113, South
Baby Blue Paint on Drywall	<0.007%	Physical Sciences Building North, Room PS-113, North Wall
Black Paint on Metal Door Frame	0.32%	Physical Sciences Building North, Room PS-123, Door Frame
White Paint on Metal Door Frame	0.032%	Physical Sciences Building North, Room PS-118, Door Frame
Gray Paint on Wood Wall	<0.006%	Physical Sciences Building North, Room PS-118, Wall
White Paint on Wood Trim	<0.006%	Physical Sciences Building North, Room PS-118, Near Ceiling
Yellow Paint on Metal Fixture	1.9%	Physical Sciences Building North, Room PS-113, On Light Fixture
Baby Blue Paint on Wood Trim	<0.006%	Physical Sciences Building North, Room PS-106, North Wall
Brown Paint on Metal Door Frame	0.20%	Physical Sciences Building North, Room PS-106, Door Frame
Black Paint on Drywall	<0.007%	Physical Sciences Building North, Room PS-132 Lecture Hall, Above Ceiling
Brown Ceramic Floor Tile	<0.006%	Physical Sciences Building North, Women's Restroom, South Wall
Red Ceramic Wall Tile	0.008%	Physical Sciences Building North, Women's Restroom, South Wall
Yellow Paint on Drywall	0.034%	Physical Sciences Building North, Room 130, Northwest Corner
Black Paint on Wood Wall	<0.006%	Physical Sciences Building North, Room Exploratorium, 132 Entrance
Red Paint on Metal Beam	0.028%	Physical Sciences Building North, Corridor, Above Ceiling Beam
Brown Paint on Metal Gutter	<0.007%	Physical Sciences Building North, Roof F, West Area
Red Paint on Metal Dome Joint	<0.007%	Physical Sciences Building North, Roof G, Southwest Area
Red Paint on Wood Dome Siding	<0.006%	Physical Sciences Building North, Roof G, Southwest Area
Black Paint on Wood Cabinet Door	<0.007%	Physical Sciences Building North, Roof J, South Area

Table 2. Lead Survey Results C-4016 Increment 3: Physical Sciences & Biology Buildings Demolition Project 2600 Mission Bell Drive San Pablo, California 94806		
Material	Lead Content	Location
Brown Paint on Metal Rail	0.12%	Physical Sciences Building North, Roof J, South Area
Black Paint on Metal Door	0.018%	Physical Sciences Building North, North Area, North Door
Orange Paint on Gypsum Wallboard	0.33%	Room 18, Southeast Corner Wall
1"x1" Ceramic Tile Gray with Black Specks	<7.7 ppm	Room 24, Southwest Corner from Countertop
Beige Paint on Gypsum Wallboard	0.14%	Room 26, Southeast Counter
4"x4" Off-White Ceramic Tile	210 ppm	Room 43, Wall
Off-White Paint on Gypsum Wallboard	<0.0078%	Room 12, Southeast Wall
Abbreviations/Acronyms		
mg/kg – milligrams per kilogram		
ppm – parts per million		
wt% – percent by weight		
mg/cm ² – milligrams per square centimeter		

A detectable concentration of lead was reported in the samples identified in bold text in the table above. All similar paints should be considered to be lead-containing based on these results. All lead-based paint in the project area is considered to contain lead at greater than 0.5% lead by weight.

As required by the California Department of Public Health, Title 17, Article 16 Regulations, dated April 20, 2008, FACS will forward Form 8552 to CDPH notifying them of the presence of LBP in the areas tested at the subject property. A copy of the Form 8552 is contained in Appendix C.

FACS recommends:

1. Current Cal/OSHA regulations (e.g. 8CCR 1532.1 "Lead in Construction" Standard) apply to all construction work where an employee may be occupationally exposed to lead. Therefore, any work performed on a surface containing any amount of lead must comply with this regulation.
2. A lead hazard control plan should be developed for the project.
3. Any paint not represented by a result that is below the analytical limit of detection should be considered to contain lead and be treated as such until proven otherwise.
4. If other suspect lead-containing materials and/or paint not previously tested are encountered during demolition activities, those materials and/or paint must be assumed to contain lead or must be sampled accordingly prior to their disturbance.
5. Building records should indicate that a complete lead hazard evaluation of the buildings was not performed. The lead paint sampling was limited to assisting with Cal/OSHA compliance.

PCB-Containing Light Ballasts and Fluorescent Light Tubes

Three hundred sixty-five (365) suspect PCB-containing ballasts and seven hundred twenty-five (725) fluorescent light tubes were identified within the buildings.

FACS recommends:

1. Based on the age of construction, the light ballasts should be assumed to be PCB-containing.
2. Any lighting fixture ballasts displaying a label indicating they contain “No PCBs” or are “PCB Free” should be assumed to contain DEHP and be recycled according to applicable state and federal regulations.
3. Fluorescent light tubes and thermostat switches typically contain mercury and other metals and their disposal is regulated under the California EPA’s Universal Waste Rules. Fluorescent light tubes should be removed prior to building demolition, should be handled so as to prevent breakage, and, if discarded, should be sent to an appropriately permitted recycler.

Asbestos Regulations

The following is a summary of some current regulations that contain requirements related to building surveys for asbestos, worker protection from asbestos exposure, and asbestos as a hazardous waste. These summaries are not intended to be all-inclusive and do not contain every aspect of the regulations discussed. For detailed regulatory requirements in specific situations, FACS may be consulted, and the applicable regulations should be examined.

Building Survey

US EPA National Emission Standard for Hazardous Air Pollutants (NESHAP), 40 CFR Part 61 and Bay Area Air Quality Management District (BAAQMD) Regulation 11 Rule 2

Under NESHAP’s regulation, no visible emissions are allowed during building demolition or renovation activities that involve regulated asbestos-containing materials (RACM). For this reason, all buildings must be surveyed for ACM prior to demolition or renovation. BAAQMD, which implements NESHAP, must be notified prior to any building demolition even if no ACM are present. BAAQMD must be notified of most renovation projects that disturb RACM. All RACM must be removed from a building prior to demolition. Any disturbance (removal) of RACM during renovation or demolition must be performed according to BAAQMD regulations.

RACM is (a) friable ACM; (b) Category I non-friable ACM that has or will become friable; (c) Category I non-friable ACM that will be or has been subjected to sanding, grinding, cutting, or abrading; or (d) Category II non-friable ACM that may become or has become crumbled, pulverized, or reduced to powder by the forces expected to act on the material in the course of demolition or renovation.

Category I non-friable ACM are asbestos-containing packings, gaskets, resilient floor coverings, mastics, and asphalt roofing products. Category II non-friable ACM is any non-friable material not designated as Category I. Per BAAQMD, these products include transite board, pipe, and asbestos-cement products, plaster, stucco, and paint.

Asbestos Hazard Emergency Response Act (AHERA), 40 CFR Part 763, Subpart E

AHERA requires asbestos surveys and the development of Asbestos Management Plans for all of the nation’s primary and secondary schools. The asbestos survey procedures of AHERA are considered the industry standard and are applied to all surveys performed by FACS unless otherwise specified.

Samples are analyzed in accordance with EPA Method 600/R-93-116, using PLM with dispersion staining and visual area estimation to determine percent asbestos content. This method allows for identifying the primary types of asbestos used in building materials. All layers in a sample must be analyzed and reported separately. Samples (and layers of samples) containing <1 percent asbestos by PLM are reported as Trace. Samples containing <10 percent asbestos (including Trace) must be further analyzed using the point-count method to determine asbestos content more accurately, or be considered >1 percent asbestos (ACM).

Composite sampling, which may potentially reduce the total asbestos content of a material, is only permitted by EPA when sampling joint compound, tape, and gypsum wallboard according to Asbestos NESHAP Clarification Regarding Analysis of Multi-Layered Systems (40 CFR Part 61 FRL-4821-7). OSHA does not recognize composite sampling.

Worker Protection

California Assembly Bill AB3713, Health and Safety Code Division 20, Chapter 10.4, Section 25915-25924

Building owners, employers, lessees, etc., must notify tenants, employees, and contractors of the presence of asbestos in both friable and non-friable forms. Preventive maintenance activities must be developed and communicated to these parties. Notification is required 15 days after the identification of ACM and asbestos-containing construction materials (ACCM, >0.1 percent asbestos) in the building, and annually thereafter.

Occupational Safety and Health Administration (OSHA) 29 CFR 1926.1101 and Cal/OSHA 8 CCR 1529 – Asbestos in Construction

OSHA and Cal/OSHA require employers to implement specific work practices to protect workers from airborne asbestos exposure. Materials that contain any detectable amount of asbestos are regulated by OSHA and Cal/OSHA.

Even building materials that contain low levels of asbestos (<1 percent) can potentially generate significant concentrations of airborne asbestos fibers when disturbed; therefore, control measures should be instituted that adequately address worker health and safety during planned renovation or demolition activities involving these materials.

OSHA requires ACM to be categorized into Thermal System Insulation (TSI), Surfacing Materials, and 'Other' Materials for the purpose of determining job classification for abatement. TSI is ACM applied to pipes, fittings, boilers, breeching, tanks, ducts, or other structural components to prevent heat loss or gain. Surfacing Material is material that is sprayed, troweled, or otherwise applied to surfaces (such as acoustical plaster on ceilings; fireproofing materials on structural members; or other materials applied to surfaces for acoustical, fireproofing, and other purposes). 'Other' materials are all ACM not categorized as TSI or Surfacing Material.

Hazardous Asbestos Waste

US EPA National Emission Standard for Hazardous Air Pollutants (NESHAP), 40 CFR Part 61 and Bay Area Air Quality Management District (BAAQMD) Regulation 11 Rule 2

Hazardous waste in California is regulated by Cal/EPA, Division of Toxic Substances Control (DTSC). In California, friable ACM (>1 percent asbestos) waste is hazardous waste. EPA defines friable ACM waste as asbestos-containing waste but does not consider it to be "hazardous waste". A waste site must be notified of the asbestos content of waste, including non-hazardous asbestos waste, prior to disposal.

Lead Regulations and Guidelines

The following is a summary of some current regulations that contain requirements related to worker protection from lead exposure and some regulations and guidelines related lead waste segregation, characterization, and disposal. These summaries are not intended to be all-inclusive and do not contain every aspect of the regulations discussed. For detailed regulatory requirements in specific situations, FACS may be consulted, and the applicable regulations should be examined.

Worker Protection

Cal/OSHA Lead in Construction Safety Standard (8 CCR 1532.1)

The current Cal/OSHA Lead in Construction Safety Standard (8 CCR 1532.1) regulation applies to all construction work where an employee may be occupationally exposed to lead; therefore, work (including manual demolition, scraping, welding, etc.) performed on surfaces containing any detectable concentration of lead must comply with the standard, including exposure assessment monitoring (personal air sampling) to determine if the airborne lead exposure levels are within acceptable limits.

For work involving a Cal/OSHA “trigger tasks” (such as sanding, cutting, torch cutting, etc.), workers must be protected during the initial exposure assessment, per the Cal/OSHA Lead Standard requirements, as if they were exposed above the Permissible Exposure Limit (PEL) until actual exposures are determined. With torch cutting, for example, this includes providing supplied air respiratory protection during the initial exposure assessment.

Lead Waste Segregation, Characterization, and Disposal

Loose and flaking paints should be scraped down to intact paint (and the resulting paint chips captured for disposal) prior to demolition. Only components with intact, well-adhered paint will then remain during demolition. Ceramic tile with high lead content should also be removed prior to demolition. The owner or removal/demolition contractor should conduct appropriate segregation of waste created during the removal or dismantling/demolition process and dispose of the different waste streams in accordance regulatory requirements based on appropriate testing results.

Lead waste is considered a hazardous waste if the result of the Toxicity Characterization Leaching Procedure (TCLP) test exceeds 5 milligrams per liter (mg/l) (5ppm), under the Resource Conservation and Recovery Act (RCRA), 40 CFR 261, Appendix II. In California, a waste is also considered hazardous if the result of soluble lead content by a Waste Extraction Test (WET) is greater than 5 mg/l, or if the total lead content exceeds 1,000 milligrams per kilogram (mg/kg) in accordance with Title 22 of the CCR. When TTLC results are below 50 mg/kg, STLC/TCLP limits cannot be exceeded, so the waste is classified as general construction debris.

For detailed regulatory requirements in specific situations, FACS may be consulted, and the applicable regulations should be examined.

As required by the California Department of Public Health, Title 17, Article 16 Regulations, dated January 8, 1999, FACS will forward Form 8552 to CDPH notifying them of the absence of lead-based paint in the areas tested at the subject property. The Form 8552 is contained in Appendix C.

1. Any sample not represented by a less than the limit of detection sample result should be considered to contain lead and be treated as such unless proven otherwise.
2. Building records should indicate that a complete lead hazard evaluation of the buildings was not performed. The lead paint sampling was limited to assisting with Cal/OSHA compliance.

Limitations

The results of this survey do not apply beyond the planned demolition described above. Suspect asbestos- and lead-containing materials in areas not included in the scope of this survey should be assumed to be ACM and lead-containing, respectively, unless testing is conducted which determines otherwise. The lead paint sampling was limited only to Cal/OSHA compliance and is not considered to be a complete lead hazard evaluation.

If revisions to the demolition project are made that impact additional materials or areas, FACS should be contacted to review the changes and/or to conduct additional survey work to address potential impact to untested materials.

This investigation is limited to the conditions and practices observed and information made available to FACS. The methods, conclusions and recommendations provided are based on FACS' judgment, expertise and the standard of practice for professional service. They are subject to the limitations and variability inherent in the methodology employed. As with all environmental investigations, this investigation is limited to the defined scope and does not purport to set forth all hazards, nor indicate that other hazards do not exist.

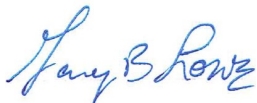
Please do not hesitate to contact our offices at 510-266-4600 with any questions or concerns. Thank you for the opportunity to assist the Contra Costa Community College District in promoting a more healthful environment.

Respectfully,

FORENSIC ANALYTICAL

Reviewed by:

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Appendix A

Results Summary Tables and Laboratory Analytical Reports



Table 3. Summary of Asbestos Analytical Results

C-4016 Increment 3: Physical Sciences & Biology Buildings Demolition Project
2600 Mission Bell Drive
San Pablo, California 94806

Sample Number	Material Description	Asbestos Content	Sample Location
Chemical Storage Building			
CSB-01	White Drywall	White Drywall: ND White Joint Compound: ND White Tape: ND	Flammables Room, Northeast Corner
CSB-02	White Drywall	White Drywall: ND White Joint Compound: ND White Tape: ND	Acid Room, Northeast Corner
CSB-03	Sealant	Black Sealant: ND	Acid Room, Northeast Corner Exhaust Air Duct
CSB-04	Sealant	Black Sealant: ND	Acid Room, Northeast Corner, Exhaust Air Duct
CSB-05	Sealant	White Sealant: ND	Exterior North Side Louvre, West
CSB-06	Sealant	White Sealant: ND	Exterior North Side Louvre, East
CSB-07	Sealant	Brown Sealant: ND	Ante-Chamber, North Entry Jamb to Hazardous Room
CSB-08	Sealant	Brown Sealant: ND	Flammables Room, North Entry Jamb
CSB-09	Mortar	Grey Mortar: ND	Exterior, East of Entry, at Deck
CSB-10	Mortar	Grey Mortar: ND	Exterior, West of Entry
CSB-11	Concrete	ND	Exterior, East of entry
CSB-12	Concrete	ND	Interior, Ante-Chamber, Center at Drainage Grill
CSB-13	Tar and Gravel Roof	Black Tar: ND Black Felt: ND	Roof Field, Northwest Quadrant
CSB-14	Tar and Gravel Roof	Black Tar: ND Black Felt: ND	Roof Field, Southeast Quadrant
CSB-15	Rolled Roofing	Stones: ND Black Tar: ND Black Felt: ND	Parapet and Flashing, Southwest Quadrant
CSB-16	Rolled Roofing	Stones: ND Black Tar: ND Black Felt: ND	Parapet and Flashing, Northeast Quadrant
CSB-17	Grey Sealant	ND	Roof Parapet, Southwest Corner
CSB-18	Grey Sealant	ND	Roof Parapet, Northeast Corner
Chiller Unit			
CE-01	TSI, Straight Run	ND	Northeast Quadrant, North Chiller Line, East End of East- West Run
CE-02	TSI, Straight Run	ND	Northeast Quadrant, North Chiller Line, North End of North- South Run

Table 3. Summary of Asbestos Analytical Results

C-4016 Increment 3: Physical Sciences & Biology Buildings Demolition Project
2600 Mission Bell Drive
San Pablo, California 94806

Sample Number	Material Description	Asbestos Content	Sample Location
CE-03	TSI, Straight Run	ND	Northwest Quadrant, North Chiller Line, East of Valve
CE-04	TSI, Valve Jacket	ND	Northwest Quadrant, North Chiller Line, Valve Jacket
CE-05	TSI	ND	West Side, Pump Manifold
CE-06	Packing	ND	Corrugated Roof Panel and Joist
CE-07	Packing	ND	Corrugated Roof Panel and Joist
CE-08	TSI	ND	Pipe Elbow Above West Pump
CE-09	Concrete	ND	Exterior, Southwest Corner, Pad
CE-10	Concrete	ND	Exterior, Northwest Corner, Pad
Biological Science Building			
BIO-A001	Tan Sheet Flooring	Sheet Flooring: ND Mastic: 25% Chrysotile Asbestos	Room 18, Southeast Corner
BIO-A002	Tan Sheet Flooring	Not Analyzed (Prior Positive)	Room 18, Northwest Corner
BIO-A003	Beige Sheet Flooring	Sheet Flooring: ND Mastic: ND	Room 18, West Side Pothole on Floor
BIO-A004	Beige Sheet Flooring	Sheet Flooring: ND Mastic: ND Concrete: ND	Room 2, East Side
BIO-A005	White Adhesive	ND	Room 16, Metal HVAC Pins
BIO-A006	White Adhesive	ND	Room 16, Metal HVAC Pins
BIO-A007	Gray Seam Mastic	ND	Room 16, HVAC
BIO-A008	Gray Seam Mastic	ND	Room 17, HVAC
BIO-A009	2"x4" White Acoustical Ceiling Tile with Fissure Pattern	Ceiling Tile: ND Paint: ND	Room 18
BIO-A010	2"x4" White Acoustical Ceiling Tile with Fissure Pattern	Ceiling Tile: ND Paint: ND	Corridor East Wall on South End
BIO-A011	Black Floor Mats with Gray Streaks	ND	Room 16
BIO-A012	Black Floor Mats with Gray Streaks	ND	Room 16
BIO-A013	Joint Compound/Drywall	Drywall: ND Joint Compound: 2% Chrysotile Asbestos Tape/Paint: ND	Room 18, Southeast Corner Wall

Table 3. Summary of Asbestos Analytical Results

C-4016 Increment 3: Physical Sciences & Biology Buildings Demolition Project
2600 Mission Bell Drive
San Pablo, California 94806

Sample Number	Material Description	Asbestos Content	Sample Location
BIO-A014	Joint Compound/Drywall	Drywall: ND Joint Compound: 2% Chrysotile Asbestos Tape/Paint: ND	Room 26, Southeast Corner
BIO-A015	Joint Compound/Drywall	Drywall: ND Joint Compound: 2% Chrysotile Asbestos Tape/Paint	Room 3 Boiler Room
BIO-A016	Joint Compound/Drywall	Drywall: ND Joint Compound: 2% Chrysotile Asbestos Tape/Paint	Janitor Closet Next to Room 7
BIO-A017	Brown Baseboard Mastic	ND	Room 18, East Wall
BIO-A018	Brown Baseboard	Mastic: ND	Room 35
BIO-A019	1"x1" Gray Ceramic Tile with Black Specks/Off-White Grout/Off-White Mortar	Ceramic Tile: ND Grout: ND Mortar: ND	Room 24, Counter Top
BIO-A020	1"x1" Gray Ceramic Tile with Black Specks/Off-White Grout/Off-White Mortar	Ceramic Tile: ND Grout: ND Mortar: ND	Room 18
BIO-A021	TSI on 4" Pipe Run	TSI: ND Wrap: ND	Room 22 Northeast Corner
BIO-A022	TSI on 4" Pipe Run	TSI: ND Wrap: ND	Room 22
BIO-A023	TSI on 4" Pipe Run	TSI: ND Wrap: ND	Room 22
BIO-A024	2"x4" White Acoustical Ceiling Tile with Pin Hole Pattern	Ceiling Tile: ND Paint: ND	Room 24
BIO-A025	2"x4" White Acoustical Ceiling Tile with Pin Hole Pattern	Ceiling Tile: ND Paint: ND	Room 39
BIO-A026	12"x12" Floor Tile with Gray Streaks/Yellow Mastic	Floor Tile: ND Mastic: ND	Room 128A
BIO-A027	12"x12" Floor Tile with Gray Streaks/Yellow Mastic	Floor Tile: ND Mastic: ND	Room 128A
BIO-A028	Red Brick and Gray Mortar	Brick: ND Mortar: ND	Room 26, North Wall
BIO-A029	Red Brick and Gray Mortar	Brick: ND Mortar: ND	Exterior, South Entrance
BIO-A030	12"x12" Floor Tile with Blue Specks/Yellow Mastic	Floor Tile: ND Mastic: ND	Corridor, South Side

Table 3. Summary of Asbestos Analytical Results

C-4016 Increment 3: Physical Sciences & Biology Buildings Demolition Project
2600 Mission Bell Drive
San Pablo, California 94806

Sample Number	Material Description	Asbestos Content	Sample Location
BIO-A031	Red Brick and Gray Mortar	Brick: ND Mortar: ND	Exterior, South Entrance
BIO-A032	12"x12" Floor Tile with Blue Specks/Yellow Mastic	Floor Tile: ND Mastic: ND	Corridor, South Side
BIO-A033	12"x12" Floor Tile with Blue Specks/Yellow Mastic	Floor Tile: ND Mastic: 2% Chrysotile Asbestos Debris/Dust: ND	Men's Restroom Vestibule, Northwest Corner
BIO-A034	Green Carpet Mastic	ND	Room 43 Southwest Corner
BIO-A035	Green Carpet	ND	Room 43 Southeast Corner
BIO-A036	Knock Down Wall Tile on Wood Panel Walls	Texture: ND Paint: ND	Corridor, North Side West End
BIO-A037	Knock Down Wall Tile on Wood Panel Walls	Texture: ND Paint: ND	Corridor, East Side Next to Room 37
BIO-A038	Knock Down Wall Tile on Wood Panel Walls	ND	Corridor West, Next to Room 18
BIO-A039	Knock Down Wall Tile on Wood Panel Walls	Texture: ND Paints: ND	Corridor East, Next to Room 13
BIO-A040	Knock Down Wall Tile on Wood Panel Walls	Texture: ND Paints: ND	South End Next to Room 2
BIO-A041	Dark Tan Resilient Sheet Flooring	Sheet Flooring: ND Mastic: ND Concrete Underlayment: ND	Room B-8 Northwest Corner
BIO-A042	Dark Tan Resilient Sheet Flooring	Sheet Flooring: ND Mastic: ND Concrete Underlayment: ND	Room 39 Northwest Corner
BIO-A043	Pipe Elbow on 4" Pipe Run	5% Chrysotile Asbestos	Room 41
BIO-A044	Pipe Elbow on 4" Pipe Run	Not Analyzed (Prior Positive)	Room 17
BIO-A045	Pipe Elbow on 4" Pipe Run	Not Analyzed (Prior Positive)	Room 43
BIO-A046	Plaster	Plaster: ND Skim Coat: ND Paint: ND	West Wall in Washroom
BIO-A047	Plaster	Plaster: ND Skim Coat: ND Paint: ND	North Wall in Study Room
BIO-A048	Plaster	Plaster: ND Skim Coat: ND Paint: ND	Women's Restroom
BIO-A049	Plaster	Plaster: ND Skim Coat: ND Paint: ND	Women's Restroom
BIO-A050	Plaster	Plaster: ND Skim Coat: ND Paint: ND	Men's Restroom

Table 3. Summary of Asbestos Analytical Results

C-4016 Increment 3: Physical Sciences & Biology Buildings Demolition Project
2600 Mission Bell Drive
San Pablo, California 94806

Sample Number	Material Description	Asbestos Content	Sample Location
BIO-A051	4"x4" Off-White Ceramic Wall Tile/Off-White Grout	Ceramic Wall Tile: ND Mortar/Grout: ND	East Wall of Room 43
BIO-A052	4"x4" Off-White Ceramic Wall Tile/Off-White Grout	Ceramic Wall Tile: ND Mortar/Grout: ND	East Wall of Room 43
BIO-A053	Yellow Wall Panel Adhesive	ND	East Wall of Room 43
BIO-A054	Yellow Wall Panel Adhesive	ND	West Wall of Room 43
BIO-A055	Yellow/Beige Baseboard Mastic	ND	Room 26
BIO-A056	Yellow/Beige Baseboard Mastic	ND	Room 2
BIO-A057	Pipe Jacket	Fiberglass: ND Jacket: ND	Room 26, On 6" Outside Diameter Pipe Run
BIO-A058	Pipe Jacket	Fiberglass: ND Jacket: ND	Room 3, On 6" Outside Diameter Pipe Run
BIO-A059	Pipe Jacket	Fiberglass: ND Jacket: ND	Room 1, On 6" Outside Diameter Pipe Run
BIO-A060	Pipe Elbow	20% Amosite Asbestos 5% Chrysotile Asbestos	Room 1, On 6" Outside Diameter Pipe Run
BIO-A061	Pipe Elbow	Not Analyzed (Prior Positive)	Room 2, East Wall, South End Above Door on 6" Outside Diameter Pipe Run
BIO-A062	Pipe Elbow	Not Analyzed (Prior Positive)	Room 43 on 6" Outside Diameter Pipe Run
BIO-A063	Black Chalkboard	20% Chrysotile Asbestos	Room 39
BIO-A064	Black Chalkboard	Not Analyzed (Prior Positive)	Room 39
BIO-A065	White Insulation	ND	Room 24, Sink Pipe Drains
BIO-A066	White Insulation	ND	Room 39, Sink Pipe Drains
BIO-A069	Red Fire Stop	ND	Room 41
BIO-A070	Red Fire Stop	ND	Room 5
BIO-A071	Black Counter Tops	35% Chrysotile Asbestos	Room 39
BIO-A072	Black Counter Tops	Not Analyzed (Prior Positive)	Room 22
BIO-A073	Gray Counter Tops	ND	Room 41, South Wall
BIO-A074	Gray Counter Tops	ND	Room 17
BIO-A075	Orange Peel Wall Tile on Drywall	Texture: 2% Chrysotile Asbestos Paint: ND	Room 2, East Wall North End
BIO-A076	Orange Peel Wall Tile on Drywall	Not Analyzed (Prior Positive)	Room B8, East Wall, South End
BIO-A077	Orange Peel Wall Tile on Drywall	Not Analyzed (Prior Positive)	Room B8, East Wall, North End
BIO-A078	Orange Peel Wall Tile on Drywall	Not Analyzed (Prior Positive)	Room 6, South Wall

Table 3. Summary of Asbestos Analytical Results

C-4016 Increment 3: Physical Sciences & Biology Buildings Demolition Project
2600 Mission Bell Drive
San Pablo, California 94806

Sample Number	Material Description	Asbestos Content	Sample Location
BIO-A079	Orange Peel Wall Tile on Drywall	Not Analyzed (Prior Positive)	Room 12
BIO-A080	Joint Compound/Drywall with Orange Peel Wall Tile	Drywall: ND Joint Compound: 3% Chrysotile Asbestos Tape: ND Paint: ND	Room B8 Southeast Corner
BIO-A081	Joint Compound/Drywall with Orange Peel Wall Tile	Drywall: ND Joint Compound: 3% Chrysotile Asbestos Tape: ND Paint: ND	Room 6, South Wall East End
BIO-A082	Joint Compound/Drywall with Orange Peel Wall Tile	Drywall: ND Joint Compound: 3% Chrysotile Asbestos Tape: ND Paint: ND	Room 12
BIO-A083	Concrete	Concrete: ND Paint: ND	Room 3 Boiler Room, Upper West Side, on Equipment Pads
BIO-A084	Concrete	Concrete: ND Paint: ND	Room 3 Boiler Room, South Wall, on Equipment Pads
BIO-A085	Pipe Gaskets	ND	Room 3 Boiler Room, Southeast Corner
BIO-A086	Pipe Gaskets	ND	Room 3 Boiler Room, South Wall
BIO-A087	12"x12" Off-White Wall Tiles Over Brown Mastic	Tile: ND Coating (White): ND Mastic: ND	Room 1, North Wall
BIO-A088	12"x12" Off-White Wall Tiles Over Brown Mastic	Tile: ND Coating (White): ND Mastic: ND	Room 1, North Wall
BIO-A089	Tank Insulation	20% Amosite Asbestos 5% Chrysotile Asbestos	Room 3 Boiler Room
BIO-A090	Tank Insulation	Not Analyzed (Prior Positive)	Room 3 Boiler Room
BIO-A091	Tank Insulation	Not Analyzed (Prior Positive)	Room 3 Boiler Room
BIO-A092	White HVAC Vibration Dampeners	40% Chrysotile Asbestos	Room 26
BIO-A093	White HVAC Vibration Dampeners	Not Analyzed (Prior Positive)	Room 37
BIO-A094	Green HVAC Vibration Dampeners	ND	Room 26
BIO-A095	Green HVAC Vibration Dampeners	ND	Room 37

Table 3. Summary of Asbestos Analytical Results

C-4016 Increment 3: Physical Sciences & Biology Buildings Demolition Project
2600 Mission Bell Drive
San Pablo, California 94806

Sample Number	Material Description	Asbestos Content	Sample Location
BIO-A096	Black Mastic on HVAC Coils Drip Pan	15% Chrysotile Asbestos	Room 26
BIO-A097	Black Mastic on HVAC Coils Drip Pan	Not Analyzed (Prior Positive)	Room 37
BIO-A098	White Cloth HVAC Gasket on HVAC	80% Chrysotile Asbestos	Room 13
BIO-A099	White Cloth HVAC Gasket on HVAC	Not Analyzed (Prior Positive)	Room 13
BIO-A100	Roof Curb Flashing	Tar with Gravel: ND Felt: ND Brown Fibrous Insulation: ND	Roof West Side North End
BIO-A101	Roof Curb Flashing	Tar with Gravel: ND Felt: ND Brown Fibrous Insulation: ND	Roof, West Side, North End
BIO-A102	Roof Exhaust Penetration Mastic	ND	Roof
BIO-A103	Roof Exhaust Penetration Mastic	ND	Roof
BIO-A104	Off-White Insulation on Pipe Bracket, Chilled Water Return Line	ND	Roof, Southwest Corner
BIO-A105	Off-White Insulation on Pipe Bracket	ND	Roof, West Side of HVAC Unit
BIO-A106	HVAC Seam Mastic	Mastic: ND Paint (Silver): 8% Chrysotile Asbestos Mesh: ND	Roof, Center, Old HVAC
BIO-A107	HVAC Seam Mastic	Not Analyzed (Prior Positive)	Roof, Southeast Corner, Old HVAC
BIO-A108	Gray Rolled Roof Patch	Shingle: ND Tar: ND Cellulose Felt: ND	Roof, Southeast Corner
BIO-A110	Gray Rolled Roof Patch	Shingle: ND Tar: ND Cellulose Felt: ND	Roof, North Side
BIO-A111	Gray Roof Mastic on Gray Rolled Roof Patches	ND	Roof, Southeast Corner
BIO-A112	Dark Gray Sealant on Generator Exhaust Duct Fan	2% Chrysotile Asbestos	Roof, Southeast Corner
BIO-A113	Dark Gray Sealant on Generator Exhaust Duct Fan	Not Analyzed (Prior Positive)	Roof, Southeast Corner
BIO-A114	Light Gray HVAC Seam Mastic	ND	Roof, Newer HVAC Unit Duct
BIO-A115	Light Gray HVAC Seam Mastic	ND	Roof, Newer HVAC Unit Duct

Table 3. Summary of Asbestos Analytical Results

C-4016 Increment 3: Physical Sciences & Biology Buildings Demolition Project
2600 Mission Bell Drive
San Pablo, California 94806

Sample Number	Material Description	Asbestos Content	Sample Location
BIO-A116	Dark Gray HVAC Seam Mastic	ND	Roof, Southwest Corner of HVAC Unit
BIO-A117	Dark Gray HVAC Seam Mastic	ND	Roof, Northwest Corner of HVAC Unit
BIO-A118	Beige Sealant on Exhaust Fan Seam	ND	Roof, Northwest, Old HVAC Unit
BIO-A119	Beige Sealant on Exhaust Fan Seam	ND	Roof, Northwest, Old HVAC Unit
BIO-A120	Silver Aluminum with Black Adhesive Duct Lining	ND	Northwest from Old HVAC Vent
BIO-A121	Silver Aluminum with Black Adhesive Duct Lining	Aluminum: ND Adhesive: ND	Northwest from Old HVAC Vent
BIO-A124	Black Coating	ND	Room 3 Boiler Room, North East Corner, On Roof Access Ladder
BIO-A125	Black Coating	ND	Room 3 Boiler Room, North East Corner, On Roof Access Ladder
BIO-A126	Stucco	Stucco: ND Skim Coat: <1% Chrysotile	Exterior, North at Entry Soffit Ceiling
BIO-A127	Stucco	Stucco: ND Skim Coat: <1% Chrysotile	Exterior, South at Entry Soffit Ceiling
BIO-A128	Stucco	Stucco: ND Skim Coat: <1% Chrysotile	Exterior, South at Entry Soffit Ceiling
BIO-A129	Concrete	ND	Room 22
BIO-A130	Concrete	ND	Room 4 Boiler Room
BIO-A131	Concrete	2% Chrysotile Asbestos	Exterior, West Side South End
BIO-A131A	Concrete	ND	Exterior West Side, South End Approximately 1.5 Feet away from Sample A131 was Collected
BIO-A131B	Concrete	ND	Exterior East Side, North End
BIO-A132	White Caulk Putty	ND	Exterior, South Side at Entry, Between Brick and Metal Window Frame
BIO-A133	White Caulk Putty	ND	Exterior, South Side at Entry, Between Brick and Metal Window Frame
BIO-A134	Light Gray Caulk	2% Chrysotile Asbestos	Exterior, East Side South End, Between Glass and Window Frame
BIO-A135	Light Gray Caulk	2% Chrysotile Asbestos	Exterior, West Side North End, Between Glass and Window Frame

Table 3. Summary of Asbestos Analytical Results

C-4016 Increment 3: Physical Sciences & Biology Buildings Demolition Project
2600 Mission Bell Drive
San Pablo, California 94806

Sample Number	Material Description	Asbestos Content	Sample Location
BIO-A136	Duct Wrap	Insulation: ND Mesh: ND	Room 26, Over Fiberglass
BIO-A137	Duct Wrap	Insulation: ND Mesh: ND	Room 37, Over Fiberglass
BIO-A138	Duct Wrap	Insulation: ND Mesh: ND	Room 13, Over Fiberglass
BIO-A139	Tar and Gravel Roof Field	Tar/Gravel: ND Glossy Tar: ND	Roof, Southeast Corner
BIO-A140	Tar and Gravel Roof Field	Tar/Gravel: ND Glossy Tar: ND	Roof, Center
BIO-A141	Tar and Gravel Roof Field	Tar/Gravel: ND Glossy Tar: ND	Roof, North Side
BIO-A142	Pipe Jacket	Insulation: ND Mesh/Coating: ND	Room 41, Over Fiberglass on 4" Outside Diameter Pipe Run
BIO-A143	Pipe Jacket	Insulation: ND Mesh/Coating: ND	Room 17, Over Fiberglass on 4" Outside Diameter Pipe Run
BIO-A144	Pipe Jacket	Insulation: ND Mesh/Coating: ND	Room 43, Over Fiberglass on 4" Outside Diameter Pipe Run
BIO-A145	1"x1" Gray Ceramic Floor Tile with Gray Grout and Off- White Mortar	Ceramic Tile: ND Grout: ND Mortar: ND	Men's Restroom
BIO-A146	1"x1" Gray Ceramic Floor Tile with Gray Grout and Off- White Mortar	Ceramic Tile: ND Grout: ND Mortar: ND	Men's Restroom
BIO-A147	Off-White HVAC Seam Tape	Coating (White): ND Mesh: ND	Room 21
BIO-A148	Off-White HVAC Seam Tape	Coating (White): ND Mesh: ND	East Room 39
BIO-A149	Black Moisture Barrier	Cellulose/Tar: ND	Exterior, East Side South End, Behind Upper Wall Wood Panel
BIO-A150	Black Moisture Barrier	Cellulose/Tar: ND	Exterior, East Side South End, Behind Upper Wall Wood Panel
BIO-A151	Concrete	ND	Room 43
BIO-A152	Concrete Foundation Wall	ND	Exterior West Side, North End
BIO-A153	Concrete Foundation Wall	ND	Exterior South Side Foundation Wall Near Building Entry
Boiler Room Building			
BR-01-A	Mortar	ND	Exterior, Northwest Corner Wall
BR-02-A	Mortar	ND	Exterior, North Side Wall
BR-03-A	Concrete	Trace Chrysotile	West Entry Threshold, Pad
BR-04-A	Concrete	Sample Not Analyzed Due to Prior Positive	Northwest Quadrant, Pad

Table 3. Summary of Asbestos Analytical Results

C-4016 Increment 3: Physical Sciences & Biology Buildings Demolition Project
2600 Mission Bell Drive
San Pablo, California 94806

Sample Number	Material Description	Asbestos Content	Sample Location
BR-05-A	Concrete	ND	West Entry, Wall Footer
BR-06-A	Concrete	ND	South Wall, Center, Wall Footer
BR-07-A	Sealant	ND	Exterior, South Wall, Penetration
BR-08-A	Sealant	ND	Exterior, South Wall, Penetration
BR-09-A	Sealant	Trace Chrysotile	Exterior, East Side, Louvre, South of Center
BR-10-A	Sealant	Sample Not Analyzed Due to Prior Positive	Exterior, East Side, Louvre, Center
BR-11-A	Glazing	ND	Exterior, East Side, South of Center
BR-12-A	Glazing	ND	Exterior, East Side, East Door
BR-13-A	Gasket	ND	Exterior, North Side, West of Center
BR-14-A	Gasket	ND	Exterior, North Side, West of Center
BR-15-A	TSI	3% Chrysotile 15% Amosite	North Side, West of Center, 10" Line Straight Run Pipe
BR-16-A	TSI	Sample Not Analyzed Due to Prior Positive	North Side, West of Center, 10" Line Straight Run Pipe
BR-17-A	TSI	Sample Not Analyzed Due to Prior Positive	South Side, West of Center, Elevated 10" Straight Run Pipe
BR-18-A	TSI	3% Chrysotile 10% Amosite	South Side, West of Center, Elevated 10" Elbow
BR-19-A	TSI	Sample Not Analyzed Due to Prior Positive	Northwest Quadrant, 10" Elbow
BR-20-A	Plaster Wall	ND	Boiler Room, West Wall
BR-21-A	Plaster Wall	ND	Boiler Room, Southeast Corner
BR-22-A	Plaster Wall	ND	Boiler Room, Northeast Corner
BR-23-A	Plaster Wall	ND	Boiler Room, Northwest Corner
BR-24-A	Plaster Wall	ND	Boiler Room, Southwest Corner
BR-25-A	TSI	ND	South Side, Near Center, Elevated 4" Straight Run
BR-26-A	TSI	ND	South Side, East of Center, Elevated 4" Straight Run
BR-27-A	TSI	ND	South Side, East of Center, Elevated 4" Straight Run
BR-28-A	TSI	3% Chrysotile 10% Amosite	South Side, Straight Run, 6" Vertical
BR-29-A	TSI	Sample Not Analyzed Due to Prior Positive	South Side, Straight Run, 6" Vertical

Table 3. Summary of Asbestos Analytical Results

C-4016 Increment 3: Physical Sciences & Biology Buildings Demolition Project
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San Pablo, California 94806

Sample Number	Material Description	Asbestos Content	Sample Location
BR-30-A	TSI	Sample Not Analyzed Due to Prior Positive	South Side, Straight Run, 6" Vertical
BR-31-A	TSI	Sample Not Analyzed Due to Prior Positive	South Side, Elbow, 6"
BR-RF-A01	Black Penetration Roof Mastic	ND	Boiler Room Roof West Area
BR-RF-A02	Black Penetration Roof Mastic	ND	Boiler Room Roof East Area
BR-RF-A03	Roof Field	Stones: ND Black Tar: ND Black Felt: ND	Boiler Room Roof West Area
BR-RF-A04	Roof Field	Stones: ND Black Tar: ND Black Felt: ND	Boiler Room Roof Center Area
BR-RF-A05	Roof Field	Stones: ND Black Tar: ND Black Felt: ND	Boiler Room Roof East Area
Physical Sciences Building North			
PSBN-001	12"x12" Floor Tile White With Blue Specks over Brown Mastic and Green Mastic	ND	Physical Sciences Building North, Room PS-109, Southeast Area, Floor
PSBN-002	12"x12" Floor Tile White With Blue Specks over Brown Mastic and Green Mastic	ND	Physical Sciences Building North, Corridor 2, Northeast Area, Floor
PSBN-003	Gray Vinyl Sheet Flooring	ND	Physical Sciences Building North, Corridor 1 Stairs, Northwest Area, Floor
PSBN-004	Gray Vinyl Sheet Flooring	ND	Physical Sciences Building North, Corridor 1 Stairs, Southeast Area, Floor
PSBN-005	Blue Carpet Over Brown Mastic	ND	Physical Sciences Building North, Room PS-113, Northeast Area, Floor
PSBN-006	Blue Carpet Over Brown Mastic	ND	Physical Sciences Building North, Room PS-106, Southwest Area, Floor
PSBN-007	Red Carpet Over Brown Mastic	ND	Physical Sciences Building North, Room PS-123, Northwest Area, Floor
PSBN-008	Red Carpet Over Brown Mastic	ND	Physical Sciences Building North, Room PS-131, West Center Area, Floor
PSBN-009	Brown Carpet Over Tan Mastic	ND	Physical Sciences Building North, PS Room 117, East Corner, Floor

Table 3. Summary of Asbestos Analytical Results

C-4016 Increment 3: Physical Sciences & Biology Buildings Demolition Project
2600 Mission Bell Drive
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Sample Number	Material Description	Asbestos Content	Sample Location
PSBN-010	Brown Carpet Over Tan Mastic	ND	Physical Sciences Building North, PS Room 118, Northeast Corner, Floor
PSBN-011	12"x12" Brown with White Specks Floor Tile Over Black Mastic	Tile: ND Mastic: 5% Chrysotile Asbestos	Physical Sciences Building North, PS Room 101, Southeast Corner, Floor
PSBN-012	12"x12" Brown with White Specks Floor Tile Over Black Mastic	Sample Not Analyzed Due to Prior Positive	Physical Sciences Building North, PS Room 102, Northwest Corner, Floor
PSBN-013	12"x12" Blue with White Streaks Floor Tile Over Black Mastic	Tile: ND Mastic: 5% Chrysotile Asbestos	Physical Sciences Building North, PS Room 101, East Area, Floor
PSBN-014	12"x12" Blue with White Streaks Floor Tile Over Black Mastic	Sample Not Analyzed Due to Prior Positive	Physical Sciences Building North, PS Room 101, West Area, Floor
PSBN-015	12"x12" Beige with Gray Streaks Floor Tile Over Black Mastic Over Brown Mastic	Tile: ND Mastic: 5% Chrysotile Asbestos	Physical Sciences Building North, PS Room 102, Southwest Area, Floor
PSBN-016	12"x12" Beige with Gray Streaks Floor Tile Over Black Mastic Over Brown Mastic	Sample Not Analyzed Due to Prior Positive	Physical Sciences Building North, PS Room 101, East Area, Floor
PSBN-017	12"x12" Red Floor Tile Over Black Mastic	Tile: ND Black Mastic: 5% Chrysotile Asbestos	Physical Sciences Building North, PS Room 102, West Area, Floor
PSBN-018	12"x12" Red Floor Tile Over Black Mastic	Sample Not Analyzed Due to Prior Positive	Physical Sciences Building North, PS Room 102, East Area, Floor
PSBN-019	12"x12" Gray with Black Dots Floor Tile Over Black Mastic	Tile: ND Mastic: 5% Chrysotile Asbestos	Physical Sciences Building North, PS Room 102, South Area, Floor
PSBN-020	12"x12" Gray with Black Dots Floor Tile Over Black Mastic	Sample Not Analyzed Due to Prior Positive	Physical Sciences Building North, PS Room 102, North Area, Floor
PSBN-021	2"x2" Gray Ceramic Floor Tile and Grout	Tile: ND Grout: ND	Physical Sciences Building North, Men's Bathroom, South Area, Floor
PSBN-022	2"x2" Gray Ceramic Floor Tile and Grout	Tile: ND Grout: ND	Physical Sciences Building North, Women's Bathroom, North Area, Floor
PSBN-023	Beige Baseboard Mastic	ND	Physical Sciences Building North, Corridor, Adjacent to Entry I-031
PSBN-024	Beige Baseboard Mastic	ND	Physical Sciences Building North, Corridor, Adjacent to Entry I-031

Table 3. Summary of Asbestos Analytical Results

C-4016 Increment 3: Physical Sciences & Biology Buildings Demolition Project
2600 Mission Bell Drive
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Sample Number	Material Description	Asbestos Content	Sample Location
PSBN-025	White Wallpaper with Adhesive	ND	Physical Sciences Building North, Room PS-107, Northeast Area, East Wall
PSBN-026	White Wallpaper with Adhesive	ND	Physical Sciences Building North, Corridor 2, Northwest Area, Wall
PSBN-027	Wallboard and Joint Compound	Wallboard: ND Joint Compound: 2% Chrysotile Asbestos Tape: ND Paint: ND	Physical Sciences Building North, Room PS-110, Northwest Corner, Wall
PSBN-028	Wallboard and Joint Compound	Sample Not Analyzed Due to Prior Positive	Physical Sciences Building North, Room PS-107, Southeast Corner, Wall
PSBN-029	Wallboard and Joint Compound	Sample Not Analyzed Due to Prior Positive	Physical Sciences Building North, Room PS-106, Northwest Corner, Wall
PSBN-030	Wallboard and Joint Compound	Sample Not Analyzed Due to Prior Positive	Physical Sciences Building North, Room PS-132, North Corner, Wall
PSBN-031	Wallboard and Joint Compound	Sample Not Analyzed Due to Prior Positive	Physical Sciences Building North, Corridor 3, Northeast Corner, Wall
PSBN-032	Wall Texture Large Splotch	Texture: ND Paint: ND	Physical Sciences Building North, Room PS-101, East Center Area, Wall
PSBN-033	Wall Texture Large Splotch	Texture: 2% Chrysotile Asbestos Paint: ND	Physical Sciences Building North, Corridor, Adjacent to Room 106, West Wall
PSBN-034	Wall Texture Large Splotch	Sample Not Analyzed Due to Prior Positive	Physical Sciences Building North, Corridor, Adjacent to Room 102, North Wall
PSBN-035	Wall Texture Large Splotch	Sample Not Analyzed Due to Prior Positive	Physical Sciences Building North, Corridor, Adjacent to Room 116, South Wall
PSBN-036	Wall Texture Large Splotch	Sample Not Analyzed Due to Prior Positive	Physical Sciences Building North, Corridor, Adjacent to Room 101, South Wall
PSBN-037	Wall Texture Orange Peel Splotch	Texture: 2% Chrysotile Asbestos Paint: ND	Physical Sciences Building North, Corridor, Adjacent to Room 116, North Wall
PSBN-038	Wall Texture Orange Peel Splotch	Sample Not Analyzed Due to Prior Positive	Physical Sciences Building North, Corridor, Adjacent to Men's Restroom, South Wall
PSBN-039	Wall Texture Orange Peel Splotch	Sample Not Analyzed Due to Prior Positive	Physical Sciences Building North, Corridor, Adjacent to

Table 3. Summary of Asbestos Analytical Results

C-4016 Increment 3: Physical Sciences & Biology Buildings Demolition Project
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Sample Number	Material Description	Asbestos Content	Sample Location
			Women's Restroom, North Wall
PSBN-040	Wall Texture Orange Peel Splotch	Sample Not Analyzed Due to Prior Positive	Physical Sciences Building North, Corridor, Adjacent to Room 132, Northwest Corner, Wall
PSBN-041	Wall Texture Orange Peel Splotch	Sample Not Analyzed Due to Prior Positive	Physical Sciences Building North, Room PS-130, Northeast Area, Wall
PSBN-042	Brick and Mortar	Cementitious Material: ND Mortar: ND	Physical Sciences Building North, Corridor 2, Southwest Area, Wall
PSBN-043	Brick and Mortar	Cementitious Material: ND Mortar: ND	Physical Sciences Building North, Corridor 1, Southeast Area, Wall
PSBN-044	2'x4' White Ceiling Tile with Pinholes	ND	Physical Sciences Building North, Central Corridor, Northeast Area, Ceiling
PSBN-045	2'x4' White Ceiling Tile with Pinholes	ND	Physical Sciences Building North, Room PS-101, Northwest Area, Ceiling
PSBN-046	12"x12" White Ceiling Tile with Fissures over Hockey Puck Mastic	ND	Physical Sciences Building North, Room PS-131, Central Area, Ceiling
PSBN-047	12"x12" White Ceiling Tile with Fissures over Hockey Puck Mastic	ND	Physical Sciences Building North, Corridor 1, Southwest Area, Ceiling
PSBN-048	Gray Window Caulking	ND	Physical Sciences Building North, Room PS-107, Southwest Area, Window
PSBN-049	Gray Window Caulking	ND	Physical Sciences Building North, Room PS-107, Northwest Area, Window
PSBN-050	White Sink Undercoat	Coating: 2% Chrysotile Asbestos	Physical Sciences Building North, Room PS-130, Under Sink
PSBN-051	White Sink Undercoat	Sample Not Analyzed Due to Prior Positive	Physical Sciences Building North, Room PS-130, Under Sink
PSBN-052	Black Sink Undercoat	ND	Physical Sciences Building North, Room PS-110, Under Sink
PSBN-053	Black Sink Undercoat	ND	Physical Sciences Building North, Room PS-110, Under Sink

Table 3. Summary of Asbestos Analytical Results

C-4016 Increment 3: Physical Sciences & Biology Buildings Demolition Project
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Sample Number	Material Description	Asbestos Content	Sample Location
PSBN-054	3"x6" Red Ceramic Wall Tile with Grout	ND	Physical Sciences Building North, Men's Restroom, Southeast Area, South Wall
PSBN-055	3"x6" Red Ceramic Wall Tile with Grout	ND	Physical Sciences Building North, Women's Restroom, Northeast Area, North Wall
PSBN-056	Black Lab Table	10% Chrysotile Asbestos	Physical Sciences Building North, Room PS-113, Lab Table
PSBN-057	Black Lab Table	Sample Not Analyzed Due to Prior Positive	Physical Sciences Building North, Room PS-106, Lab Table
PSBN-058	Black Window Caulking	2% Chrysotile	Physical Sciences Building North, Room PS-109, Southwest Area, Window
PSBN-059	Black Window Caulking	Sample Not Analyzed Due to Prior Positive	Physical Sciences Building North, Room PS-109, Northeast Area, Window
PSBN-060	Red Firestop	ND	Physical Sciences Building North, Room PS-132, Attic, South Area, Wall
PSBN-061	Red Firestop	ND	Physical Sciences Building North, Room PS-110B, Attic, East Center Area, Wall
PSBN-062	Black Duct Tape	ND	Physical Sciences Building North, Room PS-132, South Area, on Duct
PSBN-063	Black Duct Tape	ND	Physical Sciences Building North, Room PS-132, Southwest Area, on Duct
PSBN-064	Off-White Duct Vibration Cloth	ND	Physical Sciences Building North, Room PS-130, West Area, on Duct
PSBN-065	Off-White Duct Vibration Cloth	ND	Physical Sciences Building North, Room PS-130, Attic, West Area, on Duct
PSBN-066	Off-White Insulation Wrap	ND	Physical Sciences Building North, Room PS-130, Attic, East Area, on Pipe
PSBN-067	Off-White Insulation Wrap	ND	Physical Sciences Building North, Corridor 3, Center Area, on Pipe
PSBN-068	Off-White Insulation Wrap	ND	Physical Sciences Building North, Room PS-110B, Attic, Southeast Area, on Pipe

Table 3. Summary of Asbestos Analytical Results

C-4016 Increment 3: Physical Sciences & Biology Buildings Demolition Project
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Sample Number	Material Description	Asbestos Content	Sample Location
PSBN-069	Black Fiberglass Panel Cloth	ND	Physical Sciences Building North, Room PS-132, Attic, Northwest Area, on Ceiling
PSBN-070	Black Fiberglass Panel Cloth	ND	Physical Sciences Building North, Room PS-132, Attic, Northwest Area, on Ceiling
PSBN-071	Yellow Insulation Mastic	ND	Physical Sciences Building North, Room PS-110B, Attic, Southeast Area, on Tank
PSBN-072	Yellow Insulation Mastic	ND	Physical Sciences Building North, Room PS-110B, Attic, Southeast Area, on Tank
PSBN-073	Yellow Insulation Mastic	ND	Physical Sciences Building North, Room PS-110B, Attic, Southeast Area, on Tank
PSBN-074	Silver Duct Tape	ND	Physical Sciences Building North, Room PS-110B, Attic, Northeast Area, on Duct
PSBN-075	Silver Duct Tape	ND	Physical Sciences Building North, Room PS-110B, Attic, Northeast Area, on Duct
PSBN-076	Roof Field	ND	Physical Sciences Building North, Roof I, North Center Area, Floor
PSBN-077	Roof Field	ND	Physical Sciences Building North, Roof I, Central Area, Floor
PSBN-078	Middle Roof Field	ND	Physical Sciences Building North, Roof B, Central Area, Floor
PSBN-079	Middle Roof Field	ND	Physical Sciences Building North, Roof J, Southwest Area, Floor
PSBN-080	Middle Roof Field	ND	Physical Sciences Building North, Roof F, Central Area, Floor
PSBN-082	Roof Field	ND	Physical Sciences Building North, Roof H, Central Area, Floor
PSBN-083	Upper Roof Field	ND	Physical Sciences Building North, Roof G, South Area, Floor
PSBN-084	Upper Roof Field	ND	Physical Sciences Building North, Roof G, North Area, Floor
PSBN-085	Vent Penetration Mastic	ND	Physical Sciences Building North, Roof F, East Center Area, Vent

Table 3. Summary of Asbestos Analytical Results

C-4016 Increment 3: Physical Sciences & Biology Buildings Demolition Project
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Sample Number	Material Description	Asbestos Content	Sample Location
PSBN-086	Vent Penetration Mastic	ND	Physical Sciences Building North, Roof I, West Center Area, Vent
PSBN-087	Vent Penetration Mastic	ND	Physical Sciences Building North, Roof D, East Center Area, Vent
PSBN-088	Pipe Penetration Mastic	ND	Physical Sciences Building North, Roof I, Northeast Area, Pipe
PSBN-089	Pipe Penetration Mastic	ND	Physical Sciences Building North, Roof F, Southeast Area, Pipe
PSBN-090	Pipe Penetration Mastic	ND	Physical Sciences Building North, Roof B, East Center Area, Pipe
PSBN-091	Gray Mastic	ND	Physical Sciences Building North, Roof B, Adjacent to Electrical Unit, Floor
PSBN-092	Gray Mastic	ND	Physical Sciences Building North, Roof B, Adjacent to Electrical Unit, Floor
PSBN-093	White Roof Caulking	ND	Physical Sciences Building North, Roof J, West Wall
PSBN-094	White Roof Caulking	ND	Physical Sciences Building North, Roof F, South Wall
PSBN-095	Black Roof Caulking	ND	Physical Sciences Building North, Roof J, Southeast Area, Gutter
PSBN-096	Black Roof Caulking	ND	Physical Sciences Building North, Roof D, Northeast Area, Gutter
PSBN-097	Roof Flashing	ND	Physical Sciences Building North, Roof H, Northwest Area, South Wall
PSBN-098	Roof Flashing	ND	Physical Sciences Building North, Roof I, Northeast Area, North Wall
PSBN-099	Roof Flashing	ND	Physical Sciences Building North, Roof E, Northeast Area, North Wall
PSBN-100	Concrete Steps	ND	Exterior, Physical Sciences Building North, Lower Stairwell
PSBN-101	Concrete Steps	ND	Exterior, Physical Sciences Building North, Upper Stairwell
PSBN-102	White Window Caulking	ND	Exterior, Physical Sciences Building North, Northwest Area, North Wall

Table 3. Summary of Asbestos Analytical Results

C-4016 Increment 3: Physical Sciences & Biology Buildings Demolition Project
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Sample Number	Material Description	Asbestos Content	Sample Location
PSBN-103	White Window Caulking	ND	Exterior, Physical Sciences Building North, West Center Area, West Wall
PSBN-104	Stucco Wall	ND	Exterior, Physical Sciences Building North, Northwest Area, Stairwell Wall
PSBN-105	Stucco Wall	ND	Exterior, Physical Sciences Building North, North Area, North Wall
PSBN-106	Stucco Wall	ND	Exterior, Physical Sciences Building North, West Center Area, West Wall
PSBN-107	Stucco Wall	ND	Exterior, Physical Sciences Building North, West Center Area, West Wall
PSBN-108	Stucco Wall	ND	Exterior, Physical Sciences Building North, West Area Wall
PSBN-109	Brick and Mortar	ND	Exterior, Physical Sciences Building North, Northwest Area, Stairwell Wall
PSBN-110	Brick and Mortar	ND	Exterior, Physical Sciences Building North, Southwest Area, South Wall
PSBN-111	Concrete Floor	ND	Exterior, Physical Sciences Building North, Northwest Area, Adjacent to Entry, Floor
PSBN-112	Concrete Floor	ND	Exterior, Physical Sciences Building North, Southwest Area, Floor
PSBN-113	Concrete Footing	ND	Exterior, Physical Sciences Building North, North Area, Lower Wall
PSBN-114	Concrete Footing	ND	Exterior, Physical Sciences Building North, Southwest Area, West Wall
Physical Sciences Building South			
PSBS-001	12"x12" Gray with Green Floor Tiles Over Tan Mastic	ND	Physical Sciences Building South, Corridor, Southwest Area, Floor
PSBS-002	12"x12" Gray with Green Floor Tiles Over Tan Mastic	ND	Physical Sciences Building South, Corridor, Northeast Area, Floor
PSBS-003	9"x9 Tan with Brown Streaks Floor Tile Over Black Mastic	Tile: 5% Chrysotile Mastic: 5% Chrysotile	Physical Sciences Building South, Room PS-1, Southeast Area, Floor

Table 3. Summary of Asbestos Analytical Results

C-4016 Increment 3: Physical Sciences & Biology Buildings Demolition Project
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Sample Number	Material Description	Asbestos Content	Sample Location
PSBS-004	9"x9 Tan with Brown Streaks Floor Tile Over Black Mastic	Sample Not Analyzed Due to Prior Positive Result	Physical Sciences Building South, Room PS-1, Northwest Area, Floor
PSBS-005	12"x12" Beige with Dark Gray and White Floor Tiles over Black Mastic	Tile: ND Mastic: 5% Chrysotile	Physical Sciences Building South, Room PS-1, Central Area, Floor
PSBS-006	12"x12" Beige with Dark Gray and White Floor Tiles over Black Mastic	Sample Not Analyzed Due to Prior Positive Result	Physical Sciences Building South, Room PS-1, Northeast Area, Floor
PSBS-007	12"x12" Dark gray with White Streaks Floor Tiles over Black Mastic	Tile: 3% Chrysotile Mastic: 5% Chrysotile	Physical Sciences Building South, Room PS-5, Northeast Area, Floor
PSBS-008	12"x12" Dark gray with White Streaks Floor Tiles over Black Mastic	Sample Not Analyzed Due to Prior Positive Result	Physical Sciences Building South, Room 108, Southwest Area, Floor
PSBS-009	12"x12" Red with Black Streaks Floor Tile over Black and Yellow Mastic	Tile: ND Mastic: 5% Chrysotile	Physical Sciences Building South, Room PS-5, Southeast Area, Floor
PSBS-010	12"x12" Red with Black Streaks Floor Tile over Black and Yellow Mastic	Sample Not Analyzed Due to Prior Positive Result	Physical Sciences Building South, Room PS-5, Southeast Area, Floor
PSBS-011	12"x12" Light Brown with White Streaks Floor Tile over Yellow Mastic	Tile: 2% Chrysotile Mastic: ND	Physical Sciences Building South, Room PS-5, Southwest Area, Floor
PSBS-012	12"x12" Light Brown with White Streaks Floor Tile over Yellow Mastic	Sample Not Analyzed Due to Prior Positive Result	Physical Sciences Building South, Room PS-5, Southwest Area, Floor
PSBS-013	Concrete Floor	ND	Physical Sciences Building South, Room PS-6, Southeast Area, Floor
PSBS-014	Concrete Floor	ND	Physical Sciences Building South, Room PS-19, Northeast Area, Floor
PSBS-015	Tan Baseboard Mastic	ND	Physical Sciences Building South, Corridor, Southwest Area, Wall Adjacent to PS-6
PSBS-016	Tan Baseboard Mastic	ND	Physical Sciences Building South, Corridor, Northeast Area, Wall Adjacent to PS-19
PSBS-017	Black Baseboard Mastic	ND	Physical Sciences Building South, Room PS-6, Central Area
PSBS-018	Black Baseboard Mastic	ND	Physical Sciences Building South, Room PS-14, Central Area
PSBS-019	Plaster Wall	ND	Physical Sciences Building South, Room PS-2, Northeast Area, Wall

Table 3. Summary of Asbestos Analytical Results

C-4016 Increment 3: Physical Sciences & Biology Buildings Demolition Project
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Sample Number	Material Description	Asbestos Content	Sample Location
PSBS-020	Plaster Wall	ND	Physical Sciences Building South, Corridor, Central Area, South Wall
PSBS-021	Plaster Wall	ND	Physical Sciences Building South, Room PS-14, East Wall, Center Area
PSBS-022	Wall Texture	ND	Physical Sciences Building South, Corridor, Southwest Area, West Wall
PSBS-023	Wall Texture	ND	Physical Sciences Building South, Room PS-10, East Wall, Central Area
PSBS-024	Wall Texture	ND	Physical Sciences Building South, Corridor, Northeast Area, North Wall
PSBS-025	2'x4' White Ceiling Tile with Pinholes	ND	Physical Sciences Building South, Corridor, Southwest Area, Ceiling
PSBS-026	2'x4' White Ceiling Tile with Pinholes	ND	Physical Sciences Building South, Corridor, Northeast Area, Ceiling
PSBS-027	12"x12" White Ceiling Tile with Hockey Puck Mastic	ND	Physical Sciences Building South, Corridor, Southwest Area, Ceiling
PSBS-028	12"x12" White Ceiling Tile with Hockey Puck Mastic	ND	Physical Sciences Building South, Room PS-5, Central Area, Ceiling
PSBS-029	Yellow Pipe Insulation Wrap	ND	Physical Sciences Building South, Corridor, West Area
PSBS-030	Yellow Pipe Insulation Wrap	ND	Physical Sciences Building South, Corridor, West Area
PSBS-031	Off-White Pipe Insulation Wrap	ND	Physical Sciences Building South, Corridor, West Area
PSBS-032	Off-White Pipe Insulation Wrap	ND	Physical Sciences Building South, Room PS-2, Central Area
PSBS-033	Off-White Pipe Insulation Wrap	ND	Physical Sciences Building South, Room PS-2, South Area
PSBS-034	Off-White Pipe Insulation Wrap	ND	Physical Sciences Building South, Room PS-12, Southeast Area
PSBS-035	Off-White Duct Insulation Wrap	ND	Physical Sciences Building South, Room PS-2, Central Area
PSBS-036	Off-White Duct Insulation Wrap	ND	Physical Sciences Building South, Room PS-12, East Central Area

Table 3. Summary of Asbestos Analytical Results

C-4016 Increment 3: Physical Sciences & Biology Buildings Demolition Project
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Sample Number	Material Description	Asbestos Content	Sample Location
PSBS-037	Off-White Duct Insulation Wrap	ND	Physical Sciences Building South, Room PS-12, East Central Area
PSBS-038	Brick and Mortar	ND	Physical Sciences Building South, Corridor, Northwest Area, North Wall
PSBS-039	Brick and Mortar	ND	Physical Sciences Building South, Room PS-1, Southeast Area, East Wall
PSBS-040	Black Lab Table	ND	Physical Sciences Building South, Room PS-5, Central Area, Lab Table
PSBS-041	Black Lab Table	ND	Physical Sciences Building South, Room PS-6, Northeast Area, Lab Table
PSBS-042	Black Exhaust System Table Top	10% Chrysotile Asbestos	Physical Sciences Building South, Room PS-6, West Central Area
PSBS-043	Black Exhaust System Table Top	Sample Not Analyzed Due to Prior Positive Result	Physical Sciences Building South, Room PS-14, East Central Area
PSBS-044	Gray Exhaust System Panel	10% Chrysotile Asbestos	Physical Sciences Building South, Room PS-5, Southwest Area
PSBS-045	Gray Exhaust System Panel	Sample Not Analyzed Due to Prior Positive Result	Physical Sciences Building South, Room PS-5, Southwest Area
PSBS-046	Exhaust System Vibration Cloth	ND	Physical Sciences Building South, Room PS-5, Southwest Area
PSBS-047	Exhaust System Vibration Cloth	ND	Physical Sciences Building South, Room PS-5, Southwest Area
PSBS-048	Red Duct Tape	ND	Physical Sciences Building South, Room PS-5, Southwest Area
PSBS-049	Red Duct Tape	ND	Physical Sciences Building South, Room PS-5, Southwest Area
PSBS-050	Black Exhaust System Panel	10% Chrysotile Asbestos	Physical Sciences Building South, Room PS-6, West Center Area
PSBS-051	Black Exhaust System Panel	Sample Not Analyzed Due to Prior Positive Result	Physical Sciences Building South, Room PS-14, East Center Area
PSBS-052	Black Sink Undercoat	ND	Physical Sciences Building South, Room PS-12, Under Sink

Table 3. Summary of Asbestos Analytical Results

C-4016 Increment 3: Physical Sciences & Biology Buildings Demolition Project
2600 Mission Bell Drive
San Pablo, California 94806

Sample Number	Material Description	Asbestos Content	Sample Location
PSBS-053	Black Sink Undercoat	ND	Physical Sciences Building South, Room PS-19, Under Sink
PSBS-054	Red Firestop	ND	Physical Sciences Building South, Room 108, South Center Area, Wall
PSBS-055	Red Firestop	ND	Physical Sciences Building South, Room 108, North Center Area, Wall
PSBS-056	White Insulation Packing	10% Amosite Asbestos 5% Chrysotile Asbestos	Physical Sciences Building South, Room PS-12, Southeast Area
PSBS-057	White Insulation Packing	Sample Not Analyzed Due to Prior Positive Result	Physical Sciences Building South, Room PS-2, South Center Area
PSBS-058	White Insulation Packing	Sample Not Analyzed Due to Prior Positive Result	Physical Sciences Building South, Room PS-12, Southwest Area
PSBS-059	Duct Joint Cloth	ND	Physical Sciences Building South, Room PS-12, East Central Area
PSBS-060	Duct Joint Cloth	ND	Physical Sciences Building South, Room PS
PSBS-061	Plaster Wall	ND	Physical Sciences Building South, Room PS-11, East Wall, Center Area
PSBS-062	Plaster Wall	ND	Physical Sciences Building South, Room PS-15, Northeast Area, East Wall
PSBS-063	Wall Texture	ND	Physical Sciences Building South, Room PS-10, South Wall, Center Area
PSBS-064	Wall Texture	ND	Physical Sciences Building South, Corridor, North Wall, Center Area
PSBS-065	Wallboard and Joint Compound	Drywall: ND Joint Compound: 2% Chrysotile	Physical Sciences Building South, Room PS-19, Northeast Area, at Wall and Ceiling
PSBS-066	Wallboard and Joint Compound	Sample Not Analyzed Due to Prior Positive Result	Physical Sciences Building South, Room 108, Southwest Corner, Wall
PSBS-067	Wallboard and Joint Compound	Sample Not Analyzed Due to Prior Positive Result	Physical Sciences Building South, Room PS-1, Southeast Area, Wall
PSBS-068	Off White Pipe Fitting	10% Chrysotile Asbestos 5% Crocidolite	Physical Sciences Building South, Room PS-2, Water Heater Closet, Pipe

Table 3. Summary of Asbestos Analytical Results

C-4016 Increment 3: Physical Sciences & Biology Buildings Demolition Project
2600 Mission Bell Drive
San Pablo, California 94806

Sample Number	Material Description	Asbestos Content	Sample Location
PSBS-069	Off White Pipe Fitting	Sample Not Analyzed Due to Prior Positive Result	Physical Sciences Building South, Room PS-2, Water Heater Closet, Pipe
PSBS-070	Pipe Penetration Tape and Insulation	10% Amosite 2% Chrysotile	Physical Sciences Building South, Room PS-2, Water Heater Closet, Pipe Penetration
PSBS-071	Pipe Penetration Tape and Insulation	Sample Not Analyzed Due to Prior Positive Result	Physical Sciences Building South, Room PS-2, Water Heater Closet, Pipe Penetration
PSBS-072	Exhaust Hood	10% Chrysotile	Physical Sciences Building South, Room PS-6, East Center Area
PSBS-073	Exhaust Hood	Sample Not Analyzed Due to Prior Positive Result	Physical Sciences Building South, Room PS-14, West Center Area
PSBS-074	Black Lab Floor Mat	ND	Physical Sciences Building South, Room PS-12, Southwest Area, Floor
PSBS-075	Black Lab Floor Mat	ND	Physical Sciences Building South, Room PS-12, Southwest Area, Floor
PSBS-076	Silver Duct Tape	ND	Physical Sciences Building South, Room PS-12, Central Area, on Duct
PSBS-077	Silver Duct Tape	ND	Physical Sciences Building South, Room PS-12, Central Area, on Duct
PSBS-078	White Pipe	10% Chrysotile 2% Crocidolite	Physical Sciences Building South, Room PS-2, Water Heater Closet, Pipe
PSBS-079	White Pipe	Sample Not Analyzed Due to Prior Positive Result	Physical Sciences Building South, Room PS-2, Water Heater Closet, Pipe
PSBS-080	Pipe Penetration Tape and Insulation	10% Amosite 2% Chrysotile	Physical Sciences Building South, Room PS-2, Water Heater Closet, Pipe
PSBS-081	Concrete Slab	ND	Exterior, Physical Sciences Building South, Southwest Area, South Wall
PSBS-082	Concrete Slab	ND	Exterior, Physical Sciences Building South, South Center Area, South Wall
PSBS-083	White Window Caulking	Trace Chrysotile	Exterior, Physical Sciences Building South, North Center Area, Window

Table 3. Summary of Asbestos Analytical Results

C-4016 Increment 3: Physical Sciences & Biology Buildings Demolition Project
2600 Mission Bell Drive
San Pablo, California 94806

Sample Number	Material Description	Asbestos Content	Sample Location
PSBS-084	White Window Caulking	Sample Not Analyzed Due to Prior Positive Result	Exterior, Physical Sciences Building South, Northwest Area, Window
PSBS-085	Brick and Mortar	ND	Exterior, Physical Sciences Building South, Northwest Area, North Wall
PSBS-086	Brick and Mortar	ND	Exterior, Physical Sciences Building South, Southeast Area, East Wall
PSBS-087	Off-White Expansion Joint	5% Chrysotile	Exterior, Physical Sciences Building South, Southwest Corner, Wall
PSBS-088	Off-White Expansion Joint	Sample Not Analyzed Due to Prior Positive Result	Exterior, Physical Sciences Building South, Southwest Corner, Wall
PSBS-089	White Sealant	ND	Exterior, Physical Sciences Building South, Southeast Area, South Wall
PSBS-090	White Sealant	ND	Exterior, Physical Sciences Building South, Southeast Area, South Wall
PSBS-091	Black Caulking	5% Chrysotile	Exterior, Physical Sciences Building South, South Area, South Wall
PSBS-092	Black Caulking	Sample Not Analyzed Due to Prior Positive Result	Exterior, Physical Sciences Building South, South Center Area, South Wall
PSBS-093	Concrete Wall	ND	Exterior, Physical Sciences Building South, South Center Area, South Wall
PSBS-094	Concrete Wall	ND	Exterior, Physical Sciences Building South, Southeast Area, East Wall
PSBS-095	Stucco Siding	ND	Exterior, Physical Sciences Building South, Southeast Area, South Wall
PSBS-096	Stucco Siding	ND	Exterior, Physical Sciences Building South, Southeast Area, South Wall
PSBS-097	Stucco Siding	ND	Exterior, Physical Sciences Building South, Southeast Area, South Wall
PSBS-098	Upper Roof Field	ND	Exterior, Physical Sciences Building South, Southeast Area, Floor

Table 3. Summary of Asbestos Analytical Results

C-4016 Increment 3: Physical Sciences & Biology Buildings Demolition Project
2600 Mission Bell Drive
San Pablo, California 94806

Sample Number	Material Description	Asbestos Content	Sample Location
PSBS-099	Upper Roof Field	ND	Exterior, Physical Sciences Building South, Northwest Area, Floor
PSBS-100	Roof Flashing	ND	Exterior, Physical Sciences Building South, East Area, Flashing
PSBS-101	Roof Flashing	40% Chrysotile Asbestos	Exterior, Physical Sciences Building South, West Area, Flashing
PSBS-102	Lower Roof Field	ND	Physical Sciences Building South, Southwest Area, Floor
PSBS-103	Lower Roof Field	ND	Physical Sciences Building South, Northeast Area, Floor
PSBS-104	Gray Sealant	10% Chrysotile	Physical Sciences Building South, Northwest Area, Skylight
PSBS-105	Gray Sealant	Sample Not Analyzed Due to Prior Positive Result	Physical Sciences Building South, Southeast Area, Skylight
PSBS-106	Black Pipe Penetration Mastic	ND	Physical Sciences Building South, North Center Area, Pipe
PSBS-107	Black Pipe Penetration Mastic	ND	Physical Sciences Building South, South Center Area, Pipe
PSBS-108	Gray Vibration Cloth	ND	Physical Sciences Building South, Southeast Area, Duct
PSBS-109	Gray Vibration Cloth	ND	Physical Sciences Building South, Northwest Area, Duct
PSBS-110	Gray Duct Mastic	ND	Physical Sciences Building South, Roof, Southeast Area, Duct
PSBS-111	Gray Duct Mastic	ND	Physical Sciences Building South, Roof, Northwest Area, Duct

Analytical Method: Polarized Light Microscopy (PLM), EPA/600/R-93/116
ND = No Asbestos Detected

Table 4. Summary of Lead Analytical Results

C-4016 Increment 3: Physical Sciences & Biology Buildings Demolition Project
2600 Mission Bell Drive
San Pablo, California 94806

Sample Number	Material Description	Lead Content (wt. %/mg/kg or ppm)	Sample Location
Biological Science Building			
BIO-PB001	Orange Paint on Gypsum Wallboard	0.33%	Room 18, Southeast Corner Wall
BIO-PB002	1"x1" Ceramic Tile Gray with Black Specks	<7.7 ppm	Room 24, Southwest Corner from Countertop
BIO-PB003	Beige Paint on Gypsum Wallboard	0.14%	Room 26, Southeast Counter
BIO-PB004	4"x4" Off-White Ceramic Tile	210 ppm	Room 43, Wall
BIO-PB005	Off-White Paint on Gypsum Wallboard	<0.0078%	Room 12, Southeast Wall
BIO-PB006	Off-White Paint on Plaster	0.38%	Room 43, Northeast Corner Wall
BIO-PB007	Black Paint on Metal Beam	0.75%	Room 33, Center I-Beam
BIO-PB008	White Paint on Wood Trim	0.035%	Room 37, Corridor Door
BIO-PB009	Light Blue Paint on Gypsum Wallboard	<0.0081%	Corridor, South End, West Wall
BIO-PB010	Blue Paint on Wood	0.037%	Corridor, South End, Door 7
BIO-PB011	Off-White Paint on Wood	0.21%	Room 1, Southwest Adjacent Room to Electrical Beam
BIO-PB012	Beige Paint on Metal	0.016%	Room 1, Southeast Wall
BIO-PB013	Blue Paint on Metal	<0.0081	Room 3 Boiler Room, North Side Generator
BIO-PB014	Yellow Paint on Metal Support Post	0.037%	Room 3 Boiler Room
BIO-PB015	Red Paint on Metal Pipe Valve	0.022%	Room 3 Boiler Room, South Side
BIO-PB016	Gray Paint on Concrete	<0.0081%	Room 3 Boiler Room, Floor
BIO-PB017	Blue Paint on Wood	<0.0081%	Room 3 Boiler Room, South Wall Panel
BIO-PB018	1"x1" Gray Ceramic Tile	<8.9 ppm	Men's Restroom, Floor
BIO-PB019	Gray Paint on Metal	180,000 ppm	Roof Exhaust Flue
BIO-PB020	White Paint on Stucco	0.0073%	Exterior, South Side Soffit
BIO-PB021	Red Paint on Metal Duct	<0.0079%	Exterior, Southwest Corner, Duct Chase

BIO-PB022	White Paint on Metal Shade	0.023%	Exterior, West Side, Shade Lower
BIO-PB023	Beige Paint on Metal Trim	2.9%	Exterior, West Side Wall, Lower Header Trim
BIO-PB024	Brown Paint on Metal	0.063%	Exterior, Roof, Southwest Corner Parapet Cap
BIO-PB025	Black Paint on Metal	0.28%	Exterior, West Side I-Beam Column
BIO-PB026	White Paint on Wood	0.82%	Exterior, West Side Eave Joist
BIO-PB027	Red Paint on Wood	<0.0081%	Exterior, South Box
BIO-PB029	White Paint on Metal	<0.0081%	Room 29, Exhaust Hood
Chemical Storage Building			
CSB-PB-101	Grey Paint on Metal Door	<0.007%	Ante-Chamber, Flammables Door
CSB-PB-102	Beige Paint on Wallboard	<0.007%	Ante-Chamber, Wall Between Hazardous and Flammable Storage Doors
Chiller Unit			
CE-PB-101	Grey Metal Chiller Component	0.88%	Near Entry, Chiller Component
Physical Sciences Building South			
PSBS-PB01	Baby Blue Paint on Plaster	<0.006%	Physical Sciences Building South, Corridor, South Wall
PSBS-PB02	Light Orange Paint on Plaster	0.96%	Physical Sciences Building South, Room PS-8, West Wall
PSBS-PB03	Off-White Paint on Plaster	0.10%	Physical Sciences Building South, Room PS-17, West Wall
PSBS-PB04	Orange Paint on Plaster	1.9%	Physical Sciences Building South, Room PS-12, South Wall
PSBS-PB05	Dark Blue Paint on Drywall	0.11%	Physical Sciences Building South, Room PS-19, North Wall
PSBS-PB06	Brown Paint on Metal	0.38%	Physical Sciences Building South, Room PS-5, North Wall
PSBS-PB07	Baby Blue Paint on Metal	0.32%	Physical Sciences Building South, Room PS-5, North Wall
PSBS-PB08	Brown Paint on Plaster	0.26%	Physical Sciences Building South, Room PS-2, North Wall
PSBS-PB09	Black Paint on Glass	0.012%	Physical Sciences Building South, Room PS-19, Northwest Wall
PSBS-PB10	Red Paint on Metal	0.029%	Physical Sciences Building South, Room PS-5, Southwest Wall
PSBS-PB11	Off-White Paint on Metal	0.039%	Physical Sciences Building South, Room PS-2, East Wall
PSBS-PB12	Off-White Paint on Drywall	0.32%	Physical Sciences Building South, Room PS-1, South Wall
PSBS-PB13	Green Paint on Metal Window Frame	5.5%	Physical Sciences Building South, Room PS-5, North Wall

PSBS-PB14	Green Paint on Wood Wall	0.090%	Physical Sciences Building South, Room PS-5, North Wall
PSBS-PB15	Baby Blue Paint on Wood Baseboard	0.57%	Physical Sciences Building South, Room PS-6, North Wall
PSBS-PB16	Brown Paint on Wood Baseboard	0.97%	Physical Sciences Building South, Room PS-8, North Wall
PSBS-PB17	Off-White Paint on Wood Baseboard	0.29%	Physical Sciences Building South, Room PS-10, South Wall
PSBS-PB18	Light Brown Paint on Wood Cabinet	0.013%	Physical Sciences Building South, Room PS-6, Cabinet
PSBS-PB19	Dark Blue Paint on Metal Door Frame	0.34%	Physical Sciences Building South, Room PS-19, Room-108
PSBS-PB20	Black Paint on Metal Door	0.11%	Physical Sciences Building South, Room PS-19, Room 108
PSBS-PB21	Orange Paint on Metal HVAC Unit	8.5%	Physical Sciences Building South, Room PS-5, North on Hood
PSBS-PB22	Light Orange Paint on Transite Exhaust Hood	0.47%	Physical Sciences Building South, Room PS-6, South Side
PSBS-PB23	Dark Blue Paint on Transite Exhaust Hood	0.020%	Physical Sciences Building South, Room PS-14, South Wall
PSBS-PB24	Dark Brown Paint on Metal Post	3.2%	Physical Sciences Building South, Room PS-6, South Wall
PSBS-PB25	White Paint on Stucco Wall	0.19%	Exterior, Physical Sciences Building South, Southeast Area
PSBS-PB26	Brown Paint on Metal Door	2.5%	Exterior, Physical Sciences Building South, North Center Area
PSBS-PB27	Blue Paint on Metal Post	0.008%	Exterior, Physical Sciences Building South, East Center Area
Boiler Room Building			
BR-01-P	Pink Paint on Concrete Wall	0.11%	Interior, West Wall, Center
BR-02-P	Blue Paint on Metal Transformer	<0.006%	Interior, Transformer Stand, Southwest Corner
BR-03-P	Brick Red Paint on Metal Door	1.4%	Interior, Boiler Room, Entry Door, Southwest Area
BR-04-P	Brick Red Paint on Metal Pipe	1.2%	Exterior, Boiler Room, Southwest Corner, Pipe
BR-05-P	Fire Red Paint on Metal Control Panel	<0.007%	Interior, Boiler Room, South Wall, Control Panel
BR-06-P	Ferrari Red Paint on Metal Pipe Flange	0.078%	Interior, Boiler Room, Northwest Corner, Pipe Flange
BR-07-P	Yellow Paint on Metal Pipe	0.019%	Interior, Boiler Room, West Wall, Pipe Adjacent to Entry
BR-08-P	Blue Paint on Thermal System Insulation	0.18%	Interior, Boiler Room, Southeast Area, Thermal System Insulation on Pipe
BR-09-P	Blue Paint on Metal Door Frame	1.4%	Interior, Boiler Room, Northeast Entry, Door Frame
BR-10-P	Gray Paint on Pipe	<0.007%	Interior, Boiler Room, Southwest Area Adjacent to Entry
BR-11-P	Gray Paint on Pipe	0.007%	Exterior, Boiler Room, Northeast Area, Gas Meter

BR-12-P	Gray Paint on Pedestal	0.19%	Interior, Boiler Room, Northeast Area, Pedestal
Physical Sciences Building North			
PSBN-PB001	White Paint on Drywall	<0.007%	Physical Sciences Building North, Room PS-109, West Wall
PSBN-PB002	Gray Paint on Metal Door Frame	<0.006%	Physical Sciences Building North, Room PS-109, Entrance
PSBN-PB004	Beige Paint on Wood Trim	<0.006%	Physical Sciences Building North, Corridor 1, Above Entrance
PSBN-PB005	Gray Paint on Metal Handrail	0.089%	Physical Sciences Building North, Corridor 1, Center
PSBN-PB007	Red Paint on Metal Duct	0.032%	Physical Sciences Building North, Room PS-113, South
PSBN-PB008	Baby Blue Paint on Drywall	<0.007%	Physical Sciences Building North, Room PS-113, North Wall
PSBN-PB009	Black Paint on Metal Door Frame	0.32%	Physical Sciences Building North, Room PS-123, Door Frame
PSBN-PB010	White Paint on Metal Door Frame	0.032%	Physical Sciences Building North, Room PS-118, Door Frame
PSBN-PB011	Gray Paint on Wood Wall	<0.006%	Physical Sciences Building North, Room PS-118, Wall
PSBN-PB012	White Paint on Wood Trim	<0.006%	Physical Sciences Building North, Room PS-118, Near Ceiling
PSBN-PB013	Yellow Paint on Metal Fixture	1.9%	Physical Sciences Building North, Room PS-113, On Light Fixture
PSBN-PB014	Baby Blue Paint on Wood Trim	<0.006%	Physical Sciences Building North, Room PS-106, North Wall
PSBN-PB015	Brown Paint on Metal Door Frame	0.20%	Physical Sciences Building North, Room PS-106, Door Frame
PSBN-PB016	Black Paint on Drywall	<0.007%	Physical Sciences Building North, Room PS-132 Lecture Hall, Above Ceiling
PSBN-PB017	Brown Ceramic Floor Tile	<0.006%	Physical Sciences Building North, Women's Restroom, South Wall
PSBN-PB019	Red Ceramic Wall Tile	0.008%	Physical Sciences Building North, Women's Restroom, South Wall
PSBN-PB020	Yellow Paint on Drywall	0.034%	Physical Sciences Building North, Room 130, Northwest Corner
PSBN-PB021	Black Paint on Wood Wall	<0.006%	Physical Sciences Building North, Room Exploratorium, 132 Entrance
PSBN-PB022	Red Paint on Metal Beam	0.028%	Physical Sciences Building North, Corridor, Above Ceiling Beam
PSBN-PB023	Brown Paint on Metal Gutter	<0.007%	Physical Sciences Building North, Roof F, West Area
PSBN-PB024	Red Paint on Metal Dome Joint	<0.007%	Physical Sciences Building North, Roof G, Southwest Area
PSBN-PB025	Red Paint on Wood Dome Siding	<0.006%	Physical Sciences Building North, Roof G, Southwest Area
PSBN-PB026	Black Paint on Wood Cabinet Door	<0.007%	Physical Sciences Building North, Roof J, South Area
PSBN-PB027	Brown Paint on Metal Rail	0.12%	Physical Sciences Building North, Roof J, South Area

PSBN-PB028	Black Paint on Metal Door	0.018%	Physical Sciences Building North, North Area, North Door
Analytical Methods: EPA SW-846 Method 7420 and EPA 3050B/7000B < = Below Analytical Limit of Detection			



Bulk Asbestos Analysis

(EPA Method 40CFR, Part 763, Appendix E to Subpart E and EPA 600/R-93-116, Visual Area Estimation)
NVLAP Lab Code: 101459-0

Forensic Analytical Consulting Svcs
Gary Lowe
21228 Cabot Blvd.

Hayward, CA 94545

Client ID: HAY01
Report Number: B318551
Date Received: 05/28/21
Date Analyzed: 06/04/21
Date Printed: 06/04/21
First Reported: 06/04/21

Job ID/Site: PJ63338; Critical Solutions, Inc.

SGSFL Job ID: HAY01
Total Samples Submitted: 18
Total Samples Analyzed: 18

Date(s) Collected: 05/28/2021

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
CSB-01	12429061						
Layer: White Drywall			ND				
Layer: White Joint Compound			ND				
Layer: White Tape			ND				
Layer: White Joint Compound			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (20 %)	Fibrous Glass (10 %)						
CSB-02	12429062						
Layer: White Drywall			ND				
Layer: White Joint Compound			ND				
Layer: White Tape			ND				
Layer: White Joint Compound			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (20 %)	Fibrous Glass (10 %)						
CSB-03	12429063						
Layer: Black Non-Fibrous Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
CSB-04	12429064						
Layer: Black Non-Fibrous Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
CSB-05	12429065						
Layer: White Non-Fibrous Material			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							

Client Name: Forensic Analytical Consulting Svcs

Report Number: B318551

Date Printed: 06/04/21

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
CSB-06	12429066						
Layer: White Non-Fibrous Material			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
CSB-07	12429067						
Layer: Brown Semi-Fibrous Material			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace) Fibrous Glass (10 %)							
CSB-08	12429068						
Layer: Brown Semi-Fibrous Material			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace) Fibrous Glass (10 %)							
CSB-09	12429069						
Layer: Grey Mortar			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
CSB-10	12429070						
Layer: Grey Mortar			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
CSB-11	12429071						
Layer: Grey Cementitious Material			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
CSB-12	12429072						
Layer: Grey Cementitious Material			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							

Client Name: Forensic Analytical Consulting Svcs

Report Number: B318551

Date Printed: 06/04/21

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
CSB-13	12429073						
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (10 %)	Fibrous Glass (55 %)						
Comment: Bulk complex sample.							
CSB-14	12429074						
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (10 %)	Fibrous Glass (55 %)						
Comment: Bulk complex sample.							
CSB-15	12429075						
Layer: Stones			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (55 %)	Fibrous Glass (10 %)						
Comment: Bulk complex sample.							

Client Name: Forensic Analytical Consulting Svcs

Report Number: B318551

Date Printed: 06/04/21

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
CSB-16	12429076						
Layer: Stones			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (5 %) Fibrous Glass (10 %) Synthetic (55 %)							
Comment: Bulk complex sample.							
CSB-17	12429077						
Layer: Grey Non-Fibrous Material			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
CSB-18	12429078						
Layer: Grey Non-Fibrous Material			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							



Tad Thrower, Laboratory Supervisor, Hayward Laboratory

Note: Limit of Quantification ('LOQ') = 1%. 'Trace' denotes the presence of asbestos below the LOQ. 'ND' = 'None Detected'.

Analytical results and reports are generated by SGS Forensic Laboratories (SGSFL) at the request of and for the exclusive use of the person or entity (client) named on such report. Results, reports or copies of same will not be released by SGSFL to any third party without prior written request from client. This report applies only to the sample(s) tested. Supporting laboratory documentation is available upon request. This report must not be reproduced except in full, unless approved by SGSFL. The client is solely responsible for the use and interpretation of test results and reports requested from SGSFL. SGSFL is not able to assess the degree of hazard resulting from materials analyzed. SGS Forensic Laboratories reserves the right to dispose of all samples after a period of thirty (30) days, according to all state and federal guidelines, unless otherwise specified. All samples were received in acceptable condition unless otherwise noted.

Sampling Data Form / Chain of custody

Client: HA/01
 FACS: San Francisco, CA Office
 Critical Solutions, Inc.

Site: Contra Costa College 2600 Mission Bell Drive San Pablo, CA USA

Sampled By: Radzinski
 Sample Date: 28 May 2021
 Proj #: PJ63338

Turnaround Time: RUSH 24hr 48hr Extended (5 days)

Analysis: PLM Standard: _____ PLM w/ Point Count: (_____ 400pt. _____ 1,000 pt.):

Email results to: FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com

NOTES: please halt analyses @ 1st positive for each homogeneous material

HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I./Cat II.	Condition	Sample #	Sample Location	Lab result
01	T51, straight run				CE-01	NE quadrant, north chiller line end east end of E-W run	
01	T51, straight run				CE-02	NE quadrant, south north chiller line, north end of N-S run.	
01	T51, straight run				CE-03	NW quadrant, north chiller line, east of valve	
02	T51, valve jacket				CE-04	NW quadrant, north chiller line, valve jacket	
03	T51				CE-05	W. side, pump manifold	
04	packing				CE-06	corrugated ce roof panel and joist	
04	packing				CE-07	corrugated roof panel and joist	
02	T51				CE-08	pipe elbow above west pump	

drywall, JC = Joint Compound, WT=Wall Texture, VFT = Vinyl Floor Tile, VSF = Vinyl Sheet Flooring, BB = Baseboard, BBM = Baseboard Mastic, CM = Carpet Mastic, ACT = Acoustic Ceiling Tile, ACS = Sprayed-on Acoustic Material, FP = Fireproofing, PI = Pipe Insulation, PFI = Pipe fitting insulation, WP = Plaster, CP = Ceiling Plaster, ES = Exterior Stucco

Relinquished by: Radzinski
 Date and Time: 28 May 2021 / 1515

Relinquished by: _____
 Date and Time: _____

Relinquished by: _____
 Date and Time: _____



Sampling Data Form / Chain of custody

Client: HAY01
FACS: San Francisco, CA Office
 Critical Solutions, Inc.

Site: Contra Costa College 2600 Mission Bell Drive San Pablo, CA USA

Sampled By: *Redzinski*
Sample Date: *28 May 2021*
Proj #: PJ63338

Turnaround Time: RUSH 24hr 48hr Extended (5 days)

Analysis: PLM Standard: PLM w/ Point Count: (400pt. 1,000 pt.):

Email results to: FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com

Please halt analysis @ 1st & positive for each homogeneous material

HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I./Cat II.	Condition	Sample #	Sample Location	Lab result
<i>06</i>	<i>concrete</i>				<i>CE-09</i>	<i>exterior, SW corner, pad</i>	
<i>06</i>	<i>concrete</i>				<i>CE-10</i>	<i>exterior, NW corner, pad</i>	
<i>(A)</i>							
<i>(A)</i>							

DW = Drywall, JC = Joint Compound, WT=Wall Texture, VFT = Vinyl Floor Tile, VSF = Vinyl Sheet Flooring, BB = Baseboard, BBM = Baseboard Mastic, CM = Carpet Mastic, ACT = Acoustic Ceiling Tile, ACS = Sprayed-on Acoustic Ceiling Material, FP = Fireproofing, PI = Pipe Insulation, PFI = Pipe fitting insulation, WP = Plaster, CP = Ceiling Plaster, ES = Exterior Stucco

Relinquished by: *Redzinski*
Date and Time: *28 May 2021 / 1515*

Relinquished by:
Date and Time:

Relinquished by:
Date and Time:

Received by:
Date and Time:

Received by:
Date and Time:

Received by:
Date and Time:





Bulk Asbestos Analysis

(EPA Method 40CFR, Part 763, Appendix E to Subpart E and EPA 600/R-93-116, Visual Area Estimation)
NVLAP Lab Code: 101459-0

Forensic Analytical Consulting Svcs
Gary Lowe
21228 Cabot Blvd.

Hayward, CA 94545

Client ID: HAY01
Report Number: B318552
Date Received: 05/28/21
Date Analyzed: 06/04/21
Date Printed: 06/04/21
First Reported: 06/04/21

Job ID/Site: PJ63338; Critical Solutions, Inc.

SGSFL Job ID: HAY01
Total Samples Submitted: 10
Total Samples Analyzed: 10

Date(s) Collected: 05/28/2021

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
CE-01	12429079						
Layer: Yellow Fibrous Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace) Fibrous Glass (99 %)							
CE-02	12429080						
Layer: Yellow Fibrous Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace) Fibrous Glass (99 %)							
CE-03	12429081						
Layer: Yellow Fibrous Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace) Fibrous Glass (99 %)							
CE-04	12429082						
Layer: Yellow Fibrous Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace) Fibrous Glass (99 %)							
CE-05	12429083						
Layer: Black Foam			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
CE-06	12429084						
Layer: Black Foam			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
CE-07	12429085						
Layer: Black Foam			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							

Client Name: Forensic Analytical Consulting Svcs

Report Number: B318552

Date Printed: 06/04/21

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
CE-08	12429086						
Layer: Yellow Fibrous Material							ND
Layer: Tan Fibrous Material							ND
Layer: Silver Foil							ND
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (10 %)	Fibrous Glass (90 %)						
CE-09	12429087						
Layer: Grey Cementitious Material							ND
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
CE-10	12429088						
Layer: Grey Cementitious Material							ND
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							



Tad Thrower, Laboratory Supervisor, Hayward Laboratory

Note: Limit of Quantification ('LOQ') = 1%. 'Trace' denotes the presence of asbestos below the LOQ. 'ND' = 'None Detected'.

Analytical results and reports are generated by SGS Forensic Laboratories (SGSFL) at the request of and for the exclusive use of the person or entity (client) named on such report. Results, reports or copies of same will not be released by SGSFL to any third party without prior written request from client. This report applies only to the sample(s) tested. Supporting laboratory documentation is available upon request. This report must not be reproduced except in full, unless approved by SGSFL. The client is solely responsible for the use and interpretation of test results and reports requested from SGSFL. SGSFL is not able to assess the degree of hazard resulting from materials analyzed. SGS Forensic Laboratories reserves the right to dispose of all samples after a period of thirty (30) days, according to all state and federal guidelines, unless otherwise specified. All samples were received in acceptable condition unless otherwise noted.

Sampling Data Form / Chain of custody

Client: HA/01

Site: Contra Costa College 2600 Mission Bell Drive San Pablo, CA USA

Sampled By: Radzinski

FACS: San Francisco, CA Office

Sample Date: 28 May 2021

Critical Solutions, Inc.

Proj #: PJ63338

Turnaround Time: RUSH 24hr 48hr Extended (5 days)

Analysis: PLM Standard: PLM w/ Point Count: (400pt. 1,000 pt.):

Email results to: FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com

NOTES please halt analyses @ 1st positive for each homogeneous material

HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I./Cat II.	Condition	Sample #	Sample Location	Lab result
01	T51, straight run				CE-01	NE quadrant, north chiller line east end of E-W run	
01	T51, straight run				CE-02	NE quadrant, south north chiller line, north end of N-S run	
01	T51, straight run				CE-03	NW quadrant, north chiller line, east of valve	
02	T51, valve jacket				CE-04	NW quadrant, north chiller line, valve jacket	
03	T51				CE-05	W. side, pump manifold	
04	packing				CE-06	corrugated ce roof panel and joist	
04	packing				CE-07	corrugated roof panel and joist	
02	T51				CE-08	pipe elbow above west pump	

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Relinquished by: Radzinski
Date and Time: 28 May 2021 / 1515

Relinquished by:
Date and Time:

Received by:
Date and Time:



Relinquished by:
Date and Time:

Received by:
Date and Time:

Sampling Data Form / Chain of custody

Client: HAY01
FACS: San Francisco, CA Office
 Critical Solutions, Inc.

Site: Contra Costa College 2600 Mission Bell Drive San Pablo, CA USA

Sampled By: *Redzinski*
Sample Date: *28 May 2021*
Proj #: PJ63338

Turnaround Time: RUSH 24hr 48hr Extended (5 days)

Analysis: PLM Standard: PLM w/ Point Count: (400pt. 1,000 pt.):

Email results to: FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com

Please halt analysis @ 1st & positive for each homogeneous material

HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I./Cat II.	Condition	Sample #	Sample Location	Lab result
<i>06</i>	<i>concrete</i>				<i>CE-09</i>	<i>exterior, SW corner, pad</i>	
<i>06</i>	<i>concrete</i>				<i>CE-10</i>	<i>exterior, NW corner, pad</i>	
<i>(A)</i>							
<i>(A)</i>							

DW = Drywall, JC = Joint Compound, WT=Wall Texture, VFT = Vinyl Floor Tile, VSF = Vinyl Sheet Flooring, BB = Baseboard, BBM = Baseboard Mastic, CM = Carpet Mastic, ACT = Acoustic Ceiling Tile, ACS = Sprayed-on Acoustic Ceiling Material, FP = Fireproofing, PI = Pipe Insulation, PFI = Pipe fitting insulation, WP = Plaster, CP = Ceiling Plaster, ES = Exterior Stucco

Relinquished by: *Redzinski*
Date and Time: *28 May 2021 / 1515*

Relinquished by:
Date and Time:

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Date and Time:

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Received by:
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MICRO ANALYTICAL LABORATORIES, INC.

BULK ASBESTOS ANALYSIS - POLARIZED LIGHT MICROSCOPY (PLM)



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Gary Lowe
Forensic Analytical Consulting
21228 Cabot Boulevard
Hayward, CA 94545

PROJECT:
PROJECT NO. PJ63338
BIOLOGICAL SCIENCE BUILDING
CONTRA COSTA COLLEGE
2600 MISSION BELL DRIVE
SAN PABLO, CA

Micro Log In **281877**
Total Samples 144
Date Sampled 05/24/2021
Date Received 06/02/2021
Date Analyzed 06/02/2021

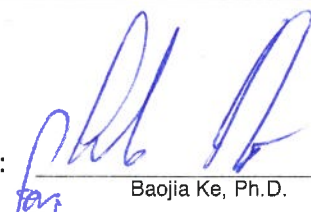
SAMPLE IDENTIFICATION

ASBESTOS QUANTITY (AREA %) / TYPES / LAYERS

DOMINANT
OTHER MATERIALS

If absent, ND Is Reported (No Asbestos Detected)

Client #: BIO-A001 Micro #: 281877-01 Analyst: JM GR TAN SHEET FLOORING WITH MOTTLE PATTERN ROOM 18 SOUTHEAST CORNER	SHEET FLOORING: ND BACKING / MASTIC: 25% CHRYSOTILE ASBESTOS	5 % CELLULOSE NFM: SYNTHETIC MATERIAL, CARBONATE.
Client #: BIO-A002 Micro #: 281877-02 Analyst: TAN SHEET FLOORING WITH MOTTLE PATTERN ROOM 18 NORTHWEST CORNER	NOT ANALYZED (PRIOR POSITIVE)	NFM:
Client #: BIO-A003 Micro #: 281877-03 Analyst: JM GR BEIGE SHEET FLOORING WITH MOTTLE PATTERN ROOM 18 WEST SIDE POTHOLE ON FLOOR	SHEET FLOORING / BACKING: ND MASTIC: ND	15 % FIBROUS GLASS 5 % SYNTHETIC FIBERS NFM: SYNTHETIC MATERIAL, CARBONATE, ADHESIVE.
Client #: BIO-A004 Micro #: 281877-04 Analyst: JM BEIGE SHEET FLOORING WITH MOTTLE PATTERN ROOM 2 EAST SIDE	SHEET FLOORING / BACKING: ND MASTIC: ND CONCRETE: ND	15 % FIBROUS GLASS 5 % SYNTHETIC FIBERS NFM: SYNTHETIC MATERIAL, CARBONATE, ADHESIVE.
Client #: BIO-A005 Micro #: 281877-05 Analyst: JM WHITE ADHESIVE ON METAL HVAC PINS - ROOM 16	ND	25 % FIBROUS GLASS NFM: RESILIENT ORGANICALLY BOUND MATERIALS, MISC. PARTICLES

Technical Supervisor: 

Baojia Ke, Ph.D.

6/4/2021

Date Reported

NVLAP Lab Code 101872-0 (TESTING). Analyses use Polarized Light Microscopy (PLM), Micro Analytical SOP PLM-101. Basic techniques follow EPA - Appendix E to Subpart E of 40 CFR Part 763; Interim Method for the Determination of Asbestos in Bulk Insulation Samples" (originally published 1982), and EPA-600/R93-116 (1993). The 1993 method covers all types of bulk materials and is based on the 1982 Method, with improved analytical techniques for layered samples as required for NESHAP compliance. Asbestos is quantified by calibrated visual estimation. Detection limit is material dependent. Detection of asbestos traces (much less than 1%) may not be reliable or reproducible by PLM. Weight % cannot be determined by PLM. Asbestos with diameter below ~1 µm may not be detected by PLM. Absence of asbestos in dust, debris, and some compact materials, including floor tiles, cannot be conclusively established by PLM, and should be confirmed by Transmission Electron Microscopy (TEM). Interferences may prevent detection of small asbestos fibers, and hinder determination of some optical properties. Tremolite-asbestos or actinolite-asbestos may be indistinguishable by PLM from some similar, non-regulated amphiboles (e.g. the "Libby Amphiboles" richterite and winchite), and should be confirmed by TEM. The lower quantitation limit (reporting limit) of PLM estimation is 1%. The Cal-OSHA definition of asbestos-containing construction material is 0.1% asbestos; however, reliable determination of asbestos percent at this level cannot be done by PLM estimation; PLM Point Counting or TEM weight percent analysis are recommended. Only dominant non-asbestos materials (fibrous and non-fibrous) are listed. This analysis shall not be construed as conclusive for the presence of any reported materials other than asbestos, or for the absence of any non-asbestos material. Common interferences include, but are not limited to: cellulose, fibrous glass, other man-made vitreous fibers, synthetic fibers, elongate fragments of calcium sulfate, talc, wollastonite, animal hair, and other miscellaneous elongate particles. Sample heterogeneity is indicated by listing more than one distinct layer or material on the report. If more than one distinct sample is received in the same container, samples shall be marked with letters and analyzed separately. Layers within a sample are analyzed separately when feasible; if asbestos is detected, percentages are reported for individual layers. Interlayer contamination is possible among any layers in a sample. The notation ND (or "NONE DETECTED") indicates a result of "NO ASBESTOS DETECTED" in a homogeneous sample, or in a layer of a heterogeneous sample. Composite asbestos percentages from multiple layers are applicable only to wallboard / joint compound systems; compositing is based on customers' descriptions of material as "joint compound". Customers are solely responsible for identification and description of bulk materials listed on field forms. Laboratory descriptions may differ from those given by customers. Quality Control (QC): all results have been determined to be within acceptance limits prior to reporting. Reanalyzed samples are denoted by two sets of analyst initials. Unless otherwise stated herein, all samples were received in acceptable condition for analysis. This report must not be used to claim product endorsement by NIST or any U.S. Government agency. This report shall not be reproduced except in full, without the approval of Micro Analytical Laboratories, Inc., and pertains only to the samples analyzed as received. NFM = Non-fibrous materials.

MICRO ANALYTICAL LABORATORIES, INC.
BULK ASBESTOS ANALYSIS - POLARIZED LIGHT MICROSCOPY (PLM)



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 21228 Cabot Boulevard
 Hayward, CA 94545

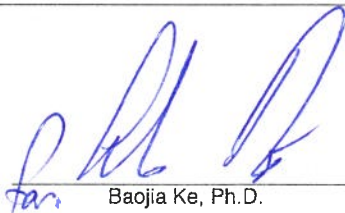
PROJECT:
PROJECT NO. PJ63338
BIOLOGICAL SCIENCE BUILDING
CONTRA COSTA COLLEGE
2600 MISSION BELL DRIVE
SAN PABLO, CA

Micro Log In **281877**
 Total Samples 144
 Date Sampled 05/24/2021
 Date Received 06/02/2021
 Date Analyzed 06/02/2021

SAMPLE IDENTIFICATION	ASBESTOS QUANTITY (AREA %) / TYPES / LAYERS	DOMINANT OTHER MATERIALS
-----------------------	---	--------------------------

If absent, ND Is Reported (No Asbestos Detected)

Client #: BIO-A006 Micro #: 281877-06 Analyst: JM WHITE ADHESIVE ON METAL HVAC PINS - ROOM 16	ADHESIVE: ND	25 % FIBROUS GLASS NFM: RESILIENT ORGANICALLY BOUND MATERIALS, MISC. PARTICLES
Client #: BIO-A007 Micro #: 281877-07 Analyst: JM GRAY HVAC SEAM MASTIC ROOM 16	ND	NFM: RESILIENT ORGANICALLY BOUND MATERIALS, MISC. PARTICLES
Client #: BIO-A008 Micro #: 281877-08 Analyst: JM GRAY HVAC SEAM MASTIC ROOM 17	ND	NFM: RESILIENT ORGANICALLY BOUND MATERIALS, MISC. PARTICLES
Client #: BIO-A009 Micro #: 281877-09 Analyst: JM 2" X 4" WHITE ACOUSTICAL CEILING TILE WITH FISSURE PATTERN - ROOM 18	CEILING TILE: ND PAINT: ND	45 % CELLULOSE NFM: PERLITE
Client #: BIO-A010 Micro #: 281877-10 Analyst: JM 2" X 4" WHITE ACOUSTICAL CEILING TILE WITH FISSURE PATTERN CORRIDOR EAST WALL ON SOUTH END	CEILING TILE: ND PAINT: ND	45 % CELLULOSE NFM: PERLITE

Technical Supervisor: 

Baojia Ke, Ph.D.

6/4/2021

Date Reported

NVLAP Lab Code 101872-0 (TESTING). Analyses use Polarized Light Microscopy (PLM), Micro Analytical SOP PLM-101. Basic techniques follow EPA – Appendix E to Subpart E of 40 CFR Part 763; Interim Method for the Determination of Asbestos in Bulk Insulation Samples" (originally published 1982), and EPA-800/R93-116 (1993). The 1993 method covers all types of bulk materials and is based on the 1982 Method, with improved analytical techniques for layered samples as required for NESHAP compliance. Asbestos is quantified by calibrated visual estimation. Detection limit is material dependent. Detection of asbestos traces (much less than 1%) may not be reliable or reproducible by PLM. Weight % cannot be determined by PLM. Asbestos with diameter below ~1 µm may not be detected by PLM. Absence of asbestos in dust, debris, and some compact materials, including floor tiles, cannot be conclusively established by PLM, and should be confirmed by Transmission Electron Microscopy (TEM). Interferences may prevent detection of small asbestos fibers, and hinder determination of some optical properties. Tremolite-asbestos or actinolite-asbestos may be indistinguishable by PLM from some similar, non-regulated amphiboles (e.g. the "Libby Amphiboles" richterite and winchite), and should be confirmed by TEM. The lower quantitation limit (reporting limit) of PLM estimation is 1%. The Cal-OSHA definition of asbestos-containing construction material is 0.1% asbestos; however, reliable determination of asbestos percent at this level cannot be done by PLM estimation; PLM Point Counting or TEM weight percent analysis are recommended. Only dominant non-asbestos materials (fibrous and non-fibrous) are listed. This analysis shall not be construed as conclusive for the presence of any reported materials other than asbestos, or for the absence of any non-asbestos material. Common interferences include, but are not limited to: cellulose, fibrous glass, other man-made vitreous fibers, synthetic fibers, elongate fragments of calcium sulfate, talc, wollastonite, animal hair, and other miscellaneous elongate particles. Sample heterogeneity is indicated by listing more than one distinct layer or material on the report. If more than one distinct sample is received in the same container, samples shall be marked with letters and analyzed separately. Layers within a sample are analyzed separately when feasible; if asbestos is detected, percentages are reported for individual layers. Interlayer contamination is possible among any layers in a sample. The notation ND (or "NONE DETECTED") indicates a result of "NO ASBESTOS DETECTED" in a homogeneous sample, or in a layer of a heterogeneous sample. Composite asbestos percentages from multiple layers are applicable only to wallboard / joint compound systems; compositing is based on customers' descriptions of material as "joint compound". Customers are solely responsible for identification and description of bulk materials listed on field forms. Laboratory descriptions may differ from those given by customers. Quality Control (QC): all results have been determined to be within acceptance limits prior to reporting. Reanalyzed samples are denoted by two sets of analyst initials. Unless otherwise stated herein, all samples were received in acceptable condition for analysis. This report must not be used to claim product endorsement by NIST or any U.S. Government agency. This report shall not be reproduced except in full, without the approval of Micro Analytical Laboratories, Inc., and pertains only to the samples analyzed as received. NFM = Non-fibrous materials.

MICRO ANALYTICAL LABORATORIES, INC.
BULK ASBESTOS ANALYSIS - POLARIZED LIGHT MICROSCOPY (PLM)



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 Hayward, CA 94545

PROJECT:
PROJECT NO. PJ63338
BIOLOGICAL SCIENCE BUILDING
CONTRA COSTA COLLEGE
2600 MISSION BELL DRIVE
SAN PABLO, CA

Micro Log In **281877**
 Total Samples 144
 Date Sampled 05/24/2021
 Date Received 06/02/2021
 Date Analyzed 06/02/2021

SAMPLE IDENTIFICATION**ASBESTOS QUANTITY (AREA %) / TYPES / LAYERS****DOMINANT
OTHER MATERIALS**

If absent, ND Is Reported (No Asbestos Detected)

Client #: BIO-A011 Micro #: 281877-11 Analyst: JM BLACK WITH GRAY STREAKS FLOOR MATS - ROOM 16	ND	45 % CELLULOSE NFM: RESILIENT ORGANICALLY BOUND MATERIALS, MISC. PARTICLES
Client #: BIO-A012 Micro #: 281877-12 Analyst: JM BLACK WITH GRAY STREAKS FLOOR MATS - ROOM 16	ND	45 % CELLULOSE NFM: RESILIENT ORGANICALLY BOUND MATERIALS, MISC. PARTICLES
Client #: BIO-A013 Micro #: 281877-13 Analyst: JM GR JOINT COMPOUND / WB ROOM 18 SOUTHEAST CORNER WALL	COMPOSITE DW & JC: <1% CHRYSOTILE ASBESTOS DRYWALL: ND JOINT COMPOUND: 2% CHRYSOTILE ASBESTOS TAPE / PAINT: ND	15 % CELLULOSE 5 % FIBROUS GLASS NFM: 'GYPSUM' (CALCIUM SULFATE), CARBONATE.
Client #: BIO-A014 Micro #: 281877-14 Analyst: JM JOINT COMPOUND / WB ROOM 26 SOUTHEAST CORNER	COMPOSITE DW & JC: <1% CHRYSOTILE ASBESTOS DRYWALL: ND JOINT COMPOUND: 2% CHRYSOTILE ASBESTOS TAPE / PAINT: ND	15 % CELLULOSE 5 % FIBROUS GLASS NFM: 'GYPSUM' (CALCIUM SULFATE), CARBONATE.
Client #: BIO-A015 Micro #: 281877-15 Analyst: JM JOINT COMPOUND / WB ROOM 3 BOILER ROOM	COMPOSITE DW & JC: <1% CHRYSOTILE ASBESTOS DRYWALL: ND JOINT COMPOUND: 2% CHRYSOTILE ASBESTOS TAPE / PAINT: ND	15 % CELLULOSE 5 % FIBROUS GLASS NFM: 'GYPSUM' (CALCIUM SULFATE), CARBONATE.

Technical Supervisor:


 Baojia Ke, Ph.D.

6/4/2021

Date Reported

NVLAP Lab Code 101872-0 (TESTING). Analyses use Polarized Light Microscopy (PLM), Micro Analytical SOP PLM-101. Basic techniques follow EPA - Appendix E to Subpart E of 40 CFR Part 763; Interim Method for the Determination of Asbestos in Bulk Insulation Samples" (originally published 1982), and EPA-800/R93-116 (1993). The 1993 method covers all types of bulk materials and is based on the 1982 Method, with improved analytical techniques for layered samples as required for NESHAP compliance. Asbestos is quantified by calibrated visual estimation. Detection limit is material dependent. Detection of asbestos traces (much less than 1%) may not be reliable or reproducible by PLM. Weight % cannot be determined by PLM. Asbestos with diameter below $\sim 1 \mu\text{m}$ may not be detected by PLM. Absence of asbestos in dust, debris, and some compact materials, including floor tiles, cannot be conclusively established by PLM, and should be confirmed by Transmission Electron Microscopy (TEM). Interferences may prevent detection of small asbestos fibers, and hinder determination of some optical properties. Tremolite-asbestos or actinolite-asbestos may be indistinguishable by PLM from some similar, non-regulated amphiboles (e.g. the "Libby Amphiboles" richterite and winchite), and should be confirmed by TEM. The lower quantitation limit (reporting limit) of PLM estimation is 1%. The Cal-OSHA definition of asbestos-containing construction material is 0.1% asbestos; however, reliable determination of asbestos percent at this level cannot be done by PLM estimation; PLM Point Counting or TEM weight percent analysis are recommended. Only dominant non-asbestos materials (fibrous and non-fibrous) are listed. This analysis shall not be construed as conclusive for the presence of any reported materials other than asbestos, or for the absence of any non-asbestos material. Common interferences include, but are not limited to: cellulose, fibrous glass, other man-made vitreous fibers, synthetic fibers, elongate fragments of calcium sulfate, talc, wollastonite, animal hair, and other miscellaneous elongate particles. Sample heterogeneity is indicated by listing more than one distinct layer or material on the report. If more than one distinct sample is received in the same container, samples shall be marked with letters and analyzed separately. Layers within a sample are analyzed separately when feasible; if asbestos is detected, percentages are reported for individual layers. Interlayer contamination is possible among any layers in a sample. The notation ND (or "NONE DETECTED") indicates a result of "NO ASBESTOS DETECTED" in a homogeneous sample, or in a layer of a heterogeneous sample. Composite asbestos percentages from multiple layers are applicable only to wallboard / joint compound systems; compositing is based on customers' descriptions of material as "joint compound". Customers are solely responsible for identification and description of bulk materials listed on field forms. Laboratory descriptions may differ from those given by customers. Quality Control (QC): all results have been determined to be within acceptance limits prior to reporting. Reanalyzed samples are denoted by two sets of analyst initials. Unless otherwise stated herein, all samples were received in acceptable condition for analysis. This report must not be used to claim product endorsement by NIST or any U.S. Government agency. This report shall not be reproduced except in full, without the approval of Micro Analytical Laboratories, Inc., and pertains only to the samples analyzed as received. NFM = Non-fibrous materials.

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BULK ASBESTOS ANALYSIS - POLARIZED LIGHT MICROSCOPY (PLM)



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PROJECT:
PROJECT NO. PJ63338
BIOLOGICAL SCIENCE BUILDING
CONTRA COSTA COLLEGE
2600 MISSION BELL DRIVE
SAN PABLO, CA

Micro Log In **281877**
 Total Samples 144
 Date Sampled 05/24/2021
 Date Received 06/02/2021
 Date Analyzed 06/02/2021

SAMPLE IDENTIFICATION

ASBESTOS QUANTITY (AREA %) / TYPES / LAYERS

DOMINANT
OTHER MATERIALS

If absent, ND Is Reported (No Asbestos Detected)

Client #: BIO-A016 Micro #: 281877-16 Analyst: JM JOINT COMPOUND / WB JANITOR CLOSET NEXT TO ROOM 7	COMPOSITE DW & JC: <1% CHRYSOTILE ASBESTOS DRYWALL: ND JOINT COMPOUND: 2% CHRYSOTILE ASBESTOS TAPE / PAINT: ND	15 % CELLULOSE 5 % FIBROUS GLASS NFM: 'GYPSUM' (CALCIUM SULFATE), CARBONATE.
Client #: BIO-A017 Micro #: 281877-17 Analyst: JM GR BROWN BASEBOARD MASTIC ROOM 18 EAST WALL	MASTIC (BROWN): ND	2 % MISC. FIBERS NFM: RESILIENT ORGANICALLY BOUND MATERIALS, MISC. PARTICLES
Client #: BIO-A018 Micro #: 281877-18 Analyst: JM BROWN BASEBOARD ROOM 35	MASTIC (BROWN): ND	2 % MISC. FIBERS NFM: RESILIENT ORGANICALLY BOUND MATERIALS, MISC. PARTICLES
Client #: BIO-A019 Micro #: 281877-19 Analyst: JM 1" X 1" GRAY CERAMIC TILE WITH BLACK SPECKS WITH OFF-WHITE GROUT WITH OFF-WHITE MORTAR ROOM 24 COUNTER TOP	CERAMIC TILE: ND GROUT: ND MORTAR: ND	NFM: ROCK FRAGMENTS, CARBONATE, BINDER
Client #: BIO-A020 Micro #: 281877-20 Analyst: JM 1" X 1" GRAY CERAMIC TILE WITH BLACK SPECKS WITH OFF-WHITE GROUT WITH OFF-WHITE MORTAR - ROOM 18	CERAMIC TILE: ND GROUT: ND MORTAR: ND	NFM: ROCK FRAGMENTS, CARBONATE, BINDER

Technical Supervisor: 

Baojia Ke, Ph.D.

6/4/2021

Date Reported

NVLAP Lab Code 101872-0 (TESTING). Analyses use Polarized Light Microscopy (PLM), Micro Analytical SOP PLM-101. Basic techniques follow EPA – Appendix E to Subpart E of 40 CFR Part 763; Interim Method for the Determination of Asbestos in Bulk Insulation Samples" (originally published 1982), and EPA-800/R93-118 (1993). The 1993 method covers all types of bulk materials and is based on the 1982 Method, with improved analytical techniques for layered samples as required for NESHAP compliance. Asbestos is quantified by calibrated visual estimation. Detection limit is material-dependent. Detection of asbestos traces (much less than 1%) may not be reliable or reproducible by PLM. Weight % cannot be determined by PLM. Asbestos with diameter below ~1 µm may not be detected by PLM. Absence of asbestos in dust, debris, and some compact materials, including floor tiles, cannot be conclusively established by PLM, and should be confirmed by Transmission Electron Microscopy (TEM). Interferences may prevent detection of small asbestos fibers, and hinder determination of some optical properties. Tremolite asbestos or actinolite asbestos may be indistinguishable by PLM from some similar, non-regulated amphiboles (e.g. the "Libby Amphiboles" richterite and winchite), and should be confirmed by TEM. The lower quantitation limit (reporting limit) of PLM estimation is 1%. The Cal-OSHA definition of asbestos-containing construction material is 0.1% asbestos; however, reliable determination of asbestos percent at this level cannot be done by PLM estimation; PLM Point Counting or TEM weight percent analysis are recommended. Only dominant non-asbestos materials (fibrous and non-fibrous) are listed. This analysis shall not be construed as conclusive for the presence of any reported materials other than asbestos, or for the absence of any non-asbestos material. Common interferences include, but are not limited to: cellulose, fibrous glass, other man-made vitreous fibers, synthetic fibers, elongate fragments of calcium sulfate, talc, wollastonite, animal hair, and other miscellaneous elongate particles. Sample heterogeneity is indicated by listing more than one distinct layer or material on the report. If more than one distinct sample is received in the same container, samples shall be marked with letters and analyzed separately. Layers within a sample are analyzed separately when feasible; if asbestos is detected, percentages are reported for individual layers. Interlayer contamination is possible among any layers in a sample. The notation ND (or "NONE DETECTED") indicates a result of "NO ASBESTOS DETECTED" in a homogeneous sample, or in a layer of a heterogeneous sample. Composite asbestos percentages from multiple layers are applicable only to wallboard / joint compound systems; compositing is based on customers' descriptions of material as "joint compound". Customers are solely responsible for identification and description of bulk materials listed on field forms. Laboratory descriptions may differ from those given by customers. Quality Control (QC): all results have been determined to be within acceptance limits prior to reporting. Reanalyzed samples are denoted by two sets of analyst initials. Unless otherwise stated herein, all samples were received in acceptable condition for analysis. This report must not be used to claim product endorsement by NIST or any U.S. Government agency. This report shall not be reproduced except in full, without the approval of Micro Analytical Laboratories, Inc., and pertains only to the samples analyzed as received. NFM = Non-fibrous materials.

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BULK ASBESTOS ANALYSIS - POLARIZED LIGHT MICROSCOPY (PLM)



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PROJECT:
PROJECT NO. PJ63338
BIOLOGICAL SCIENCE BUILDING
CONTRA COSTA COLLEGE
2600 MISSION BELL DRIVE
SAN PABLO, CA

Micro Log In **281877**
Total Samples 144
Date Sampled 05/24/2021
Date Received 06/02/2021
Date Analyzed 06/02/2021

SAMPLE IDENTIFICATION

ASBESTOS QUANTITY (AREA %) / TYPES / LAYERS

DOMINANT
OTHER MATERIALS

If absent, ND Is Reported (No Asbestos Detected)

Client #: BIO-A021 Micro #: 281877-21 Analyst: JM GR TSI ON 4" OD PIPE RUN ROOM 22 NORTH EAST CORNER	TSI: ND WRAP: ND	10 % CELLULOSE NFM: CARBONATE PERLITE
Client #: BIO-A022 Micro #: 281877-22 Analyst: JM TSI ON 4' OD PIPE RUN ROOM 22	TSI: ND WRAP: ND	10 % CELLULOSE NFM: CARBONATE PERLITE
Client #: BIO-A023 Micro #: 281877-23 Analyst: JM TSI ON 4' OD PIPE RUN ROOM 22	TSI: ND WRAP: ND	10 % CELLULOSE NFM: CARBONATE, MISC. PARTICLES
Client #: BIO-A024 Micro #: 281877-24 Analyst: JM 2" X 4" WHITE ACOUSTICAL CEILING TILE WITH PIN HOLE PATTERN - ROOM 24	CEILING TILE: ND PAINT: ND	45 % CELLULOSE 15 % FIBROUS GLASS NFM: PERLITE
Client #: BIO-A025 Micro #: 281877-25 Analyst: JM 2" X 4" WHITE ACOUSTICAL CEILING TILE WITH PIN HOLE PATTERN CENTER OF ROOM 39	CEILING TILE: ND PAINT: ND	45 % CELLULOSE 15 % FIBROUS GLASS NFM: PERLITE

Technical Supervisor: 

Baojia Ke, Ph.D.

6/4/2021

Date Reported

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BULK ASBESTOS ANALYSIS - POLARIZED LIGHT MICROSCOPY (PLM)



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PROJECT:
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CONTRA COSTA COLLEGE
2600 MISSION BELL DRIVE
SAN PABLO, CA

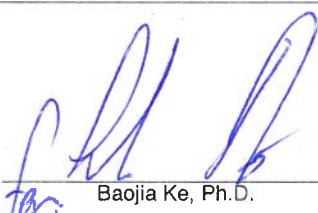
Micro Log In **281877**
Total Samples 144
Date Sampled 05/24/2021
Date Received 06/02/2021
Date Analyzed 06/02/2021

SAMPLE IDENTIFICATION**ASBESTOS QUANTITY (AREA %) / TYPES / LAYERS****DOMINANT
OTHER MATERIALS**

If absent, ND Is Reported (No Asbestos Detected)

Client #: BIO-A026 Micro #: 281877-26 Analyst: JM 12" X 12" FT OFF-WHITE WITH GRAY STREAKS WITH YELLOW MASTIC - ROOM 128A ON FLOOR	FLOOR TILE: ND MASTIC: ND	NFM: SYNTHETIC MATERIAL, CARBONATE, ADHESIVE.
Client #: BIO-A027 Micro #: 281877-27 Analyst: JM 12" X 12" FT OFF-WHITE WITH GRAY STREAKS WITH YELLOW MASTIC ROOM 128A ON FLOOR	FLOOR TILE: ND MASTIC: ND	NFM: SYNTHETIC MATERIAL, CARBONATE, ADHESIVE.
Client #: BIO-A030 Micro #: 281877-28 Analyst: JM RED BRICK AND GRAY MORTAR ROOM 26 NORTH WALL	BRICK: ND MORTAR: ND	NFM: ROCK FRAGMENTS, CARBONATE, BINDER
Client #: BIO-A031 Micro #: 281877-29 Analyst: JM RED BRICK AND GRAY MORTAR EXT. SOUTH ENTRANCE	BRICK: ND MORTAR: ND	NFM: ROCK FRAGMENTS, CARBONATE, BINDER
Client #: BIO-A032 Micro #: 281877-30 Analyst: JM 12" X 12" FLOOR TILE WITH BLUE SPECKS OVER YELLOW MASTIC CORRIDOR SOUTH SIDE	FLOOR TILE: ND MASTIC (YELLOW): ND	NFM: SYNTHETIC MATERIAL, CARBONATE, ADHESIVE.

Technical Supervisor:


Baojia Ke, Ph.D.

6/4/2021

Date Reported

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BULK ASBESTOS ANALYSIS - POLARIZED LIGHT MICROSCOPY (PLM)



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PROJECT:
PROJECT NO. PJ63338
BIOLOGICAL SCIENCE BUILDING
CONTRA COSTA COLLEGE
2600 MISSION BELL DRIVE
SAN PABLO, CA

Micro Log In **281877**
 Total Samples 144
 Date Sampled 05/24/2021
 Date Received 06/02/2021
 Date Analyzed 06/02/2021

SAMPLE IDENTIFICATION	ASBESTOS QUANTITY (AREA %) / TYPES / LAYERS	DOMINANT OTHER MATERIALS
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If absent, ND is Reported (No Asbestos Detected)

Client #: BIO-A033 Micro #: 281877-31 Analyst: JM GR 12" X 12" FLOOR TILE WITH BLUE SPECKS OVER YELLOW MASTIC MEN'S RESTROOM VESTIBULE NORTHWEST CORNER	FLOOR TILE: ND MASTICS (YELLOW / TAN): 2% CHRYSOTILE ASBESTOS DEBRIS / DUST: ND	5% CELLULOSE 5% SYNTHETIC FIBERS NFM: SYNTHETIC MATERIAL, CARBONATE, ADHESIVE.
Client #: BIO-A034 Micro #: 281877-32 Analyst: JM GREEN CARPET MASTIC ROOM 43 SOUTHWEST CORNER	ND	5% SYNTHETIC FIBERS NFM: RESILIENT ORGANICALLY BOUND MATERIALS, MISC. PARTICLES
Client #: BIO-A035 Micro #: 281877-33 Analyst: JM GREEN CARPET ROOM 43 SOUTHEAST CORNER	ND	10% SYNTHETIC FIBERS NFM: RESILIENT ORGANICALLY BOUND MATERIALS, MISC. PARTICLES
Client #: BIO-A036 Micro #: 281877-34 Analyst: JM KNOCK DOWN WT ON WOOD PANEL WALLS CORRIDOR NORTH SIDE WEST END	TEXTURE: ND PAINT: ND	NFM: SYNTHETIC MATERIAL, CARBONATE.
Client #: BIO-A037 Micro #: 281877-35 Analyst: JM KNOCK DOWN WT ON WOOD PANEL WALLS CORRIDOR EAST NEXT TO ROOM 37	TEXTURE: ND PAINT: ND	NFM: SYNTHETIC MATERIAL, CARBONATE.

Technical Supervisor: 

Baojia Ke, Ph.D.

6/4/2021

Date Reported

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PROJECT:
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BIOLOGICAL SCIENCE BUILDING
CONTRA COSTA COLLEGE
2600 MISSION BELL DRIVE
SAN PABLO, CA

Micro Log In **281877**
 Total Samples 144
 Date Sampled 05/24/2021
 Date Received 06/02/2021
 Date Analyzed 06/02/2021

SAMPLE IDENTIFICATION	ASBESTOS QUANTITY (AREA %) / TYPES / LAYERS If absent, ND Is Reported (No Asbestos Detected)	DOMINANT OTHER MATERIALS
Client #: BIO-A038 Micro #: 281877-36 Analyst: JM KNOCK DOWN WT ON WOOD PANEL WALLS CORRIDOR WEST NEXT TO ROOM 18	ND	NFM: SYNTHETIC MATERIAL, CARBONATE.
Client #: BIO-A039 Micro #: 281877-37 Analyst: GR KNOCK DOWN WT ON WOOD PANEL WALLS CORRIDOR EAST NEXT TO ROOM 13	TEXTURE: ND PAINTS: ND	NFM: SYNTHETIC MATERIAL, CARBONATE.
Client #: BIO-A040 Micro #: 281877-38 Analyst: GR KNOCK DOWN WT ON WOOD PANEL WALLS SOUTH END NEXT TO ROOM 2	TEXTURE: ND PAINTS: ND	NFM: SYNTHETIC MATERIAL, CARBONATE.
Client #: BIO-A041 Micro #: 281877-39 Analyst: GR DARK TAN RSF WITH MOTTLE PATTERN ROOM B-8 NORTHWEST CORNER	SHEET FLOORING: ND BACKING / MASTICS (YELLOW / BEIGE): ND CONCRETE UNDERLAYMENT: ND	5% CELLULOSE 25% SYNTHETIC FIBERS NFM: SYNTHETIC MATERIAL, CARBONATE.
Client #: BIO-A042 Micro #: 281877-40 Analyst: GR DARK TAN RSF WITH MOTTLE PATTERN ROOM 39 NORTHWEST CORNER	SHEET FLOORING: ND BACKING / MASTICS (YELLOW / BEIGE): ND CONCRETE UNDERLAYMENT: ND	5% CELLULOSE 25% SYNTHETIC FIBERS NFM: SYNTHETIC MATERIAL, CARBONATE.

Technical Supervisor: 

Baojia Ke, Ph.D.

6/4/2021

Date Reported

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Micro Log In **281877**
 Total Samples 144
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SAMPLE IDENTIFICATION	ASBESTOS QUANTITY (AREA %) / TYPES / LAYERS	DOMINANT OTHER MATERIALS
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If absent, ND Is Reported (No Asbestos Detected)

Client #: BIO-A043 Micro #: 281877-41 Analyst: GR PIPE ELBOW ON 4" OD PIPE RUN ROOM 41	5% CHRYSOTILE ASBESTOS	5 % CELLULOSE 70 % FIBROUS GLASS NFM: CARBONATE SYNTHETIC MATERIAL GLASS FRAGMENTS
Client #: BIO-A044 Micro #: 281877-42 Analyst: PIPE ELBOW ON 4" OD PIPE RUN ROOM 17	NOT ANALYZED (PRIOR POSITIVE)	NFM:
Client #: BIO-A045 Micro #: 281877-43 Analyst: PIPE ELBOW ON 4" OD PIPE RUN ROOM 43	NOT ANALYZED (PRIOR POSITIVE)	NFM:
Client #: BIO-A046 Micro #: 281877-44 Analyst: GR PLASTER WEST WALL IN WASHROOM	PLASTER: ND SKIM COAT: ND PAINT: ND	3 % CELLULOSE NFM: "GYPSUM (CALCIUM SULFATE) CARBONATE SYNTHETIC MATERIAL
Client #: BIO-A047 Micro #: 281877-45 Analyst: GR PLASTER NORTH WALL IN STUDY ROOM	PLASTER: ND SKIM COAT: ND PAINT: ND	3 % CELLULOSE NFM: "GYPSUM (CALCIUM SULFATE) CARBONATE SYNTHETIC MATERIAL

Technical Supervisor: 

Baojia Ke, Ph.D.

6/4/2021

Date Reported

NVLAP Lab Code 101872-0 (TESTING). Analyses use Polarized Light Microscopy (PLM), Micro Analytical SOP PLM-101. Basic techniques follow EPA - Appendix E to Subpart E of 40 CFR Part 763; Interim Method for the Determination of Asbestos in Bulk Insulation Samples" (originally published 1982), and EPA-600/R93-116 (1993). The 1993 method covers all types of bulk materials and is based on the 1982 Method, with improved analytical techniques for layered samples as required for NESHAP compliance. Asbestos is quantified by calibrated visual estimation. Detection limit is material dependent. Detection of asbestos traces (much less than 1%) may not be reliable or reproducible by PLM. Weight % cannot be determined by PLM. Asbestos with diameter below ~1 µm may not be detected by PLM. Absence of asbestos in dust, debris, and some compact materials, including floor tiles cannot be conclusively established by PLM, and should be confirmed by Transmission Electron Microscopy (TEM). Interferences may prevent detection of small asbestos fibers, and hinder determination of some optical properties. Tremolite-asbestos or actinolite-asbestos may be indistinguishable by PLM from some similar, non-regulated amphiboles (e.g. the "Libby Amphiboles" richterite and winchite), and should be confirmed by TEM. The lower quantitation limit (reporting limit) of PLM estimation is 1%. The Cal-OSHA definition of asbestos-containing construction material is 0.1% asbestos; however, reliable determination of asbestos percent at this level cannot be done by PLM estimation; PLM Point Counting or TEM weight percent analysis are recommended. Only dominant non-asbestos materials (fibrous and non-fibrous) are listed. This analysis shall not be construed as conclusive for the presence of any reported materials other than asbestos, or for the absence of any non-asbestos material. Common interferences include, but are not limited to: cellulose, fibrous glass, other man-made vitreous fibers, synthetic fibers, elongate fragments of calcium sulfate, talc, wollastonite, animal hair, and other miscellaneous elongate particles. Sample heterogeneity is indicated by listing more than one distinct layer or material on the report. If more than one distinct sample is received in the same container, samples shall be marked with letters and analyzed separately. Layers within a sample are analyzed separately when feasible; if asbestos is detected, percentages are reported for individual layers. Interlayer contamination is possible among any layers in a sample. The notation ND (or "NONE DETECTED") indicates a result of "NO ASBESTOS DETECTED" in a homogeneous sample, or in a layer of a heterogeneous sample. Composite asbestos percentages from multiple layers are applicable only to wallboard / joint compound systems; compositing is based on customers' descriptions of material as "joint compound". Customers are solely responsible for identification and description of bulk materials listed on field forms. Laboratory descriptions may differ from those given by customers. Quality Control (QC): all results have been determined to be within acceptance limits prior to reporting. Reanalyzed samples are denoted by two sets of analyst initials. Unless otherwise stated herein, all samples were received in acceptable condition for analysis. This report must not be used to claim product endorsement by NIST or any U.S. Government agency. This report shall not be reproduced except in full, without the approval of Micro Analytical Laboratories, Inc., and pertains only to the samples analyzed as received. NFM = Non-fibrous materials.

MICRO ANALYTICAL LABORATORIES, INC.
BULK ASBESTOS ANALYSIS - POLARIZED LIGHT MICROSCOPY (PLM)



1212
 Gary Lowe
 Forensic Analytical Consulting
 21228 Cabot Boulevard
 Hayward, CA 94545

PROJECT:
PROJECT NO. PJ63338
BIOLOGICAL SCIENCE BUILDING
CONTRA COSTA COLLEGE
2600 MISSION BELL DRIVE
SAN PABLO, CA

Micro Log In **281877**
 Total Samples 144
 Date Sampled 05/24/2021
 Date Received 06/02/2021
 Date Analyzed 06/02/2021

SAMPLE IDENTIFICATION	ASBESTOS QUANTITY (AREA %) / TYPES / LAYERS	DOMINANT OTHER MATERIALS
	If absent, ND Is Reported (No Asbestos Detected)	

Client #: BIO-A048 Micro #: 281877-46 Analyst: GR PLASTER WOMEN'S RESTROOM	PLASTER: ND SKIM COAT: ND PAINT: ND	3 % CELLULOSE NFM: *GYPSUM (CALCIUM SULFATE) CARBONATE SYNTHETIC MATERIAL
Client #: BIO-A049 Micro #: 281877-47 Analyst: GR PLASTER WOMEN'S RESTROOM	PLASTER: ND SKIM COAT: ND PAINT: ND	3 % CELLULOSE NFM: *GYPSUM (CALCIUM SULFATE) CARBONATE SYNTHETIC MATERIAL
Client #: BIO-A050 Micro #: 281877-48 Analyst: GR GR PLASTER MEN'S RESTROOM	PLASTER: ND SKIM COAT: ND PAINT: ND	3 % CELLULOSE NFM: *GYPSUM (CALCIUM SULFATE) CARBONATE SYNTHETIC MATERIAL
Client #: BIO-A051 Micro #: 281877-49 Analyst: GR 4" X 4" OFF-WHITE CERAMIC WALL TILE WITH OFF-WHITE GROUT WITH OFF-WHITE GROUT EAST WALL OF ROOM 43	CERAMIC WALL TILE: ND MORTAR / GROUT: ND	NFM: CARBONATE ROCK FRAGMENTS CERAMIC
Client #: BIO-A052 Micro #: 281877-50 Analyst: GR 4" X 4" OFF-WHITE CERAMIC WALL TILE WITH OFF-WHITE GROUT WITH OFF-WHITE GROUT EAST WALL OF ROOM 43	CERAMIC WALL TILE: ND MORTAR / GROUT: ND	NFM: CARBONATE ROCK FRAGMENTS CERAMIC

Technical Supervisor: 

Baojia Ke, Ph.D.

6/4/2021

Date Reported

NVLAP Lab Code 101872-0 (TESTING). Analyses use Polarized Light Microscopy (PLM), Micro Analytical SOP PLM-101. Basic techniques follow EPA - Appendix E to Subpart E of 40 CFR Part 763; Interim Method for the Determination of Asbestos in Bulk Insulation Samples" (originally published 1982), and EPA-600/R93-116 (1993). The 1993 method covers all types of bulk materials and is based on the 1982 Method, with improved analytical techniques for layered samples as required for NESHAP compliance. Asbestos is quantified by calibrated visual estimation. Detection limit is material dependent. Detection of asbestos traces (much less than 1%) may not be reliable or reproducible by PLM. Weight % cannot be determined by PLM. Asbestos with diameter below ~1 µm may not be detected by PLM. Absence of asbestos in dust, debris, and some compact materials, including floor tiles, cannot be conclusively established by PLM, and should be confirmed by Transmission Electron Microscopy (TEM). Interferences may prevent detection of small asbestos fibers, and hinder determination of some optical properties. Tremolite-asbestos or actinolite-asbestos may be indistinguishable by PLM from some similar, non-regulated amphiboles (e.g. the "Libby Amphiboles" richterite and winchite), and should be confirmed by TEM. The lower quantitation limit (reporting limit) of PLM estimation is 1%. The Cal-OSHA definition of asbestos-containing construction material is 0.1% asbestos; however, reliable determination of asbestos percent at this level cannot be done by PLM estimation; PLM Point Counting or TEM weight percent analysis are recommended. Only dominant non-asbestos materials (fibrous and non-fibrous) are listed. This analysis shall not be construed as conclusive for the presence of any reported materials other than asbestos, or for the absence of any non-asbestos material. Common interferences include, but are not limited to: cellulose, fibrous glass, other man-made vitreous fibers, synthetic fibers, elongate fragments of calcium sulfate, talc, wollastonite, animal hair, and other miscellaneous elongate particles. Sample heterogeneity is indicated by listing more than one distinct layer or material on the report. If more than one distinct sample is received in the same container, samples shall be marked with letters and analyzed separately. Layers within a sample are analyzed separately when feasible; if asbestos is detected, percentages are reported for individual layers. Interlayer contamination is possible among any layers in a sample. The notation ND (or "NONE DETECTED") indicates a result of "NO ASBESTOS DETECTED" in a homogeneous sample, or in a layer of a heterogeneous sample. Composite asbestos percentages from multiple layers are applicable only to wallboard / joint compound systems; compositing is based on customers' descriptions of material as "joint compound". Customers are solely responsible for identification and description of bulk materials listed on field forms. Laboratory descriptions may differ from those given by customers. Quality Control (QC): all results have been determined to be within acceptance limits prior to reporting. Reanalyzed samples are denoted by two sets of analyst initials. Unless otherwise stated herein, all samples were received in acceptable condition for analysis. This report must not be used to claim product endorsement by NIST or any U.S. Government agency. This report shall not be reproduced except in full, without the approval of Micro Analytical Laboratories, Inc., and pertains only to the samples analyzed as received. NFM = Non-fibrous materials.

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PROJECT:
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BIOLOGICAL SCIENCE BUILDING
CONTRA COSTA COLLEGE
2600 MISSION BELL DRIVE
SAN PABLO, CA

Micro Log In **281877**
 Total Samples 144
 Date Sampled 05/24/2021
 Date Received 06/02/2021
 Date Analyzed 06/03/2021

SAMPLE IDENTIFICATION	ASBESTOS QUANTITY (AREA %) / TYPES / LAYERS If absent, ND Is Reported (No Asbestos Detected)	DOMINANT OTHER MATERIALS
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Client #: BIO-A053 Micro #: 281877-51 Analyst: JM YELLOW WALL PANEL ADHESIVE EAST WALL OF ROOM 43	ND	NFM: RESILIENT ORGANICALLY BOUND MATERIALS, MISC. PARTICLES
Client #: BIO-A054 Micro #: 281877-52 Analyst: JM YELLOW WALL PANEL ADHESIVE WEST WALL OF ROOM 43	ND	NFM: RESILIENT ORGANICALLY BOUND MATERIALS, MISC. PARTICLES
Client #: BIO-A055 Micro #: 281877-53 Analyst: JM YELLOW / BEIGE BASEBOARD MASTIC ROOM 26	ND	NFM: RESILIENT ORGANICALLY BOUND MATERIALS, MISC. PARTICLES
Client #: BIO-A056 Micro #: 281877-54 Analyst: JM YELLOW / BEIGE BASEBOARD MASTIC ROOM 2	ND	5 % CELLULOSE NFM: RESILIENT ORGANICALLY BOUND MATERIALS, MISC. PARTICLES
Client #: BIO-A057 Micro #: 281877-55 Analyst: JM FIBERGLASS PIPE LAGGING (JACKET) OVER ON 6" OD PIPE RUN - ROOM 26	FIBERGLASS: ND JACKET: ND	10 % CELLULOSE 80 % FIBROUS GLASS NFM: GLASS FRAGMENTS, BINDER.

Technical Supervisor: 

Baojia Ke, Ph.D.

6/4/2021

Date Reported

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PROJECT:
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BIOLOGICAL SCIENCE BUILDING
CONTRA COSTA COLLEGE
2600 MISSION BELL DRIVE
SAN PABLO, CA

Micro Log In **281877**
 Total Samples 144
 Date Sampled 05/24/2021
 Date Received 06/02/2021
 Date Analyzed 06/03/2021

SAMPLE IDENTIFICATION	ASBESTOS QUANTITY (AREA %) / TYPES / LAYERS	DOMINANT OTHER MATERIALS
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If absent, ND Is Reported (No Asbestos Detected)

Client #: BIO-A058 Micro #: 281877-56 Analyst: JM FIBERGLASS PIPE LAGGING (JACKET) OVER ON 6" OD PIPE RUN - ROOM 3	FIBERGLASS: ND JACKET: ND	10 % CELLULOSE 80 % FIBROUS GLASS NFM: GLASS FRAGMENTS, BINDER.
Client #: BIO-A059 Micro #: 281877-57 Analyst: JM PIPE LAGGING (JACKET) OVER FIBERGLASS ON 6" OD PIPE RUN ROOM 1	FIBERGLASS: ND JACKET: ND	10 % CELLULOSE 80 % FIBROUS GLASS NFM: GLASS FRAGMENTS, BINDER.
Client #: BIO-A060 Micro #: 281877-58 Analyst: JM PIPE ELBOW ON 6" OD PIPE RUN ROOM 1	20% AMOSITE ASBESTOS 5% CHRYSOTILE ASBESTOS	NFM: CARBONATE, MISC. PARTICLES
Client #: BIO-A061 Micro #: 281877-59 Analyst: PIPE ELBOW ON 6" OD PIPE RUN ROOM 2 EAST WALL SOUTH END ABOVE DOOR	NOT ANALYZED (PRIOR POSITIVE)	NFM:
Client #: BIO-A062 Micro #: 281877-60 Analyst: PIPE ELBOW ON 6" OD PIPE RUN ROOM 43	NOT ANALYZED (PRIOR POSITIVE)	NFM:

Technical Supervisor: 

Baojia Ke, Ph.D.

6/4/2021

Date Reported

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PROJECT:
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BIOLOGICAL SCIENCE BUILDING
CONTRA COSTA COLLEGE
2600 MISSION BELL DRIVE
SAN PABLO, CA

Micro Log In **281877**
 Total Samples 144
 Date Sampled 05/24/2021
 Date Received 06/02/2021
 Date Analyzed 06/03/2021

SAMPLE IDENTIFICATION**ASBESTOS QUANTITY (AREA %) / TYPES / LAYERS****DOMINANT
OTHER MATERIALS**

If absent, ND Is Reported (No Asbestos Detected)

Client #: BIO-A063		
Micro #: 281877-61 BLACK CHALK BOARD ROOM 39	Analyst: JM	20% CHRYSOTILE ASBESTOS
		NFM: CARBONATE, MISC. PARTICLES
Client #: BIO-A064		
Micro #: 281877-62 BLACK CHALK BOARD ROOM 2	Analyst:	NOT ANALYZED (PRIOR POSITIVE)
		NFM:
Client #: BIO-A065		
Micro #: 281877-63 WHITE INSULATION ON SINK PIPE DRAINS - ROOM 24	Analyst: JM AF	ND
		NFM: CARBONATE, MISC. PARTICLES
Client #: BIO-A066		
Micro #: 281877-64 WHITE INSULATION ON SINK PIPE DRAINS - ROOM 39	Analyst: JM	ND
		NFM: CARBONATE, MISC. PARTICLES
Client #: BIO-A069		
Micro #: 281877-65 RED FIRE STOP ROOM 41	Analyst: JM	ND
		15 % FIBROUS GLASS NFM: RESILIENT ORGANICALLY BOUND MATERIALS, MISC. PARTICLES

Technical Supervisor:


 Baojia Ke, Ph.D.

6/4/2021

Date Reported

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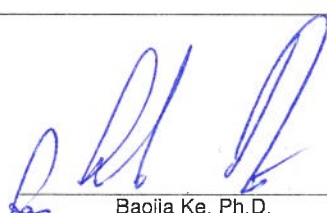
Micro Log In **281877**
 Total Samples 144
 Date Sampled 05/24/2021
 Date Received 06/02/2021
 Date Analyzed 06/03/2021

SAMPLE IDENTIFICATION **ASBESTOS QUANTITY (AREA %) / TYPES / LAYERS** **DOMINANT OTHER MATERIALS**

If absent, ND is Reported (No Asbestos Detected)

Client #: BIO-A070		
Micro #: 281877-66 RED FIRE STOP ROOM 5	Analyst: JM	ND
		15 % FIBROUS GLASS NFM: RESILIENT ORGANICALLY BOUND MATERIALS, MISC. PARTICLES
Client #: BIO-A071		
Micro #: 281877-67 BLACK COUNTER TOPS ROOM 39	Analyst: JM	35% CHRYSOTILE ASBESTOS
		NFM: ROCK FRAGMENTS, CARBONATE, BINDER
Client #: BIO-A072		
Micro #: 281877-68 BLACK COUNTER TOPS ROOM 22	Analyst:	NOT ANALYZED (PRIOR POSITIVE)
		NFM:
Client #: BIO-A073		
Micro #: 281877-69 GRAY COUNTER TOPS SOUTH WALL OF ROOM 41	Analyst: JM AF	ND
		NFM: ROCK FRAGMENTS, CARBONATE, BINDER
Client #: BIO-A074		
Micro #: 281877-70 GRAY COUNTER TOPS ROOM 17	Analyst: JM AF	ND
		NFM: ROCK FRAGMENTS, CARBONATE, BINDER

Technical Supervisor:


 Baojia Ke, Ph.D.

6/4/2021

Date Reported

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	If absent, ND Is Reported (No Asbestos Detected)	

Client #: BIO-A075 Micro #: 281877-71 Analyst: BK ORANGE PEEL WT ON DRYWALL EAST WALL NORTH END ROOM 2	TEXTURE: 2% CHRYSOTILE ASBESTOS PAINT: ND	NFM: CARBONATE, MISC. PARTICLES
Client #: BIO-A076 Micro #: 281877-72 Analyst: ORANGE PEEL WT ON DRYWALL ROOM B8 EAST WALL SOUTH END	NOT ANALYZED (PRIOR POSITIVE)	NFM:
Client #: BIO-A077 Micro #: 281877-73 Analyst: ORANGE PEEL WT ON DRYWALL ROOM B8 EAST WALL NORTH END	NOT ANALYZED (PRIOR POSITIVE)	NFM:
Client #: BIO-A078 Micro #: 281877-74 Analyst: ORANGE PEEL WT ON DRYWALL ROOM 6 SOUTH WALL	NOT ANALYZED (PRIOR POSITIVE)	NFM:
Client #: BIO-A079 Micro #: 281877-75 Analyst: ORANGE PEEL WT ON DRYWALL ROOM 12	NOT ANALYZED (PRIOR POSITIVE)	NFM:

Technical Supervisor:

Baojia Ke, Ph.D.

6/4/2021

Date Reported

NVLAP Lab Code 101872-0 (TESTING). Analyses use Polarized Light Microscopy (PLM), Micro Analytical SOP PLM-101. Basic techniques follow EPA - Appendix E to Subpart E of 40 CFR Part 763; Interim Method for the Determination of Asbestos in Bulk Insulation Samples" (originally published 1982), and EPA-600/R93-116 (1993). The 1993 method covers all types of bulk materials and is based on the 1982 Method, with improved analytical techniques for layered samples as required for NESHAP compliance. Asbestos is quantified by calibrated visual estimation. Detection limit is material dependent. Detection of asbestos traces (much less than 1%) may not be reliable or reproducible by PLM. Weight % cannot be determined by PLM. Asbestos with diameter below ~1 μm may not be detected by PLM. Absence of asbestos in dust, debris, and some compact materials, including floor tiles, cannot be conclusively established by PLM, and should be confirmed by Transmission Electron Microscopy (TEM). Interferences may prevent detection of small asbestos fibers, and hinder determination of some optical properties. Tremolite-asbestos or actinolite-asbestos may be indistinguishable by PLM from some similar, non-regulated amphiboles (e.g. the "Libby Amphiboles" richterite and winchite), and should be confirmed by TEM. The lower quantitation limit (reporting limit) of PLM estimation is 1%. The Cal-OSHA definition of asbestos-containing construction material is 0.1% asbestos; however, reliable determination of asbestos percent at this level cannot be done by PLM estimation; PLM Point Counting or TEM weight percent analysis are recommended. Only dominant non-asbestos materials (fibrous and non-fibrous) are listed. This analysis shall not be construed as conclusive for the presence of any reported materials other than asbestos, or for the absence of any non-asbestos material. Common interferences include, but are not limited to: cellulose, fibrous glass, other man-made vitreous fibers, synthetic fibers, elongate fragments of calcium sulfate, talc, wollastonite, animal hair, and other miscellaneous elongate particles. Sample heterogeneity is indicated by listing more than one distinct layer or material on the report. If more than one distinct sample is received in the same container, samples shall be marked with letters and analyzed separately. Layers within a sample are analyzed separately when feasible; if asbestos is detected, percentages are reported for individual layers. Interlayer contamination is possible among any layers in a sample. The notation ND (or "NONE DETECTED") indicates a result of "NO ASBESTOS DETECTED" in a homogeneous sample, or in a layer of a heterogeneous sample. Composite asbestos percentages from multiple layers are applicable only to wallboard / joint compound systems; compositing is based on customers' descriptions of material as "joint compound". Customers are solely responsible for identification and description of bulk materials listed on field forms. Laboratory descriptions may differ from those given by customers. Quality Control (QC): all results have been determined to be within acceptance limits prior to reporting. Reanalyzed samples are denoted by two sets of analyst initials. Unless otherwise stated herein, all samples were received in acceptable condition for analysis. This report must not be used to claim product endorsement by NIST or any U.S. Government agency. This report shall not be reproduced except in full, without the approval of Micro Analytical Laboratories, Inc., and pertains only to the samples analyzed as received. NFM = Non-fibrous materials.

MICRO ANALYTICAL LABORATORIES, INC.
BULK ASBESTOS ANALYSIS - POLARIZED LIGHT MICROSCOPY (PLM)



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 21228 Cabot Boulevard
 Hayward, CA 94545

PROJECT:
PROJECT NO. PJ63338
BIOLOGICAL SCIENCE BUILDING
CONTRA COSTA COLLEGE
2600 MISSION BELL DRIVE.
SAN PABLO, CA

Micro Log In **281877**
 Total Samples 144
 Date Sampled 05/24/2021
 Date Received 06/02/2021
 Date Analyzed 06/02/2021

SAMPLE IDENTIFICATION	ASBESTOS QUANTITY (AREA %) / TYPES / LAYERS	DOMINANT OTHER MATERIALS
If absent, ND Is Reported (No Asbestos Detected)		
Client #: BIO-A080 Micro #: 281877-76 Analyst: BK JOINT COMPOUND / WB ON DRYWALL WITH ORANGE PEEL WT ROOM B8 SOUTH EAST CORNER	COMPOSITE DW & JC: <1% CHRYSOTILE ASBESTOS DRYWALL: ND JOINT COMPOUND: 3% CHRYSOTILE ASBESTOS TAPE: ND PAINT: ND	10 % CELLULOSE NFM: GYPSUM (CALCIUM SULFATE), CARBONATE.
Client #: BIO-A081 Micro #: 281877-77 Analyst: BK JOINT COMPOUND / WB ON DRYWALL WITH ORANGE PEEL WT ROOM 6 SOUTH WALL EAST END	COMPOSITE DW & JC: <1% CHRYSOTILE ASBESTOS DRYWALL: ND JOINT COMPOUND: 3% CHRYSOTILE ASBESTOS TAPE: ND PAINT: ND	10 % CELLULOSE NFM: GYPSUM (CALCIUM SULFATE), CARBONATE.
Client #: BIO-A082 Micro #: 281877-78 Analyst: BK JOINT COMPOUND / WB ON DRYWALL WITH ORANGE PEEL WT - ROOM 12	COMPOSITE DW & JC: <1% CHRYSOTILE ASBESTOS DRYWALL: ND JOINT COMPOUND: 3% CHRYSOTILE ASBESTOS TAPE: ND PAINT: ND	10 % CELLULOSE NFM: GYPSUM (CALCIUM SULFATE), CARBONATE.
Client #: BIO-A083 Micro #: 281877-79 Analyst: BK AF CONCRETE ON EQUIPMENT PADS ROOM 3 BOILER ROOM UPPER WEST SIDE	CONCRETE: ND PAINT: ND	NFM: ROCK FRAGMENTS, CARBONATE; BINDER
Client #: BIO-A084 Micro #: 281877-80 Analyst: BK CONCRETE ON EQUIPMENT PADS ROOM 3 BOILER ROOM SOUTH WALL	CONCRETE: ND PAINT: ND	NFM: ROCK FRAGMENTS, CARBONATE, BINDER

Technical Supervisor: 

Baojia Ke, Ph.D.

6/4/2021

Date Reported

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PROJECT:
PROJECT NO. PJ63338
BIOLOGICAL SCIENCE BUILDING
CONTRA COSTA COLLEGE
2600 MISSION BELL DRIVE
SAN PABLO, CA

Micro Log In **281877**
 Total Samples 144
 Date Sampled 05/24/2021
 Date Received 06/02/2021
 Date Analyzed 06/02/2021

SAMPLE IDENTIFICATION	ASBESTOS QUANTITY (AREA %) / TYPES / LAYERS If absent, ND is Reported (No Asbestos Detected)	DOMINANT OTHER MATERIALS
Client #: BIO-A085 Micro #: 281877-81 Analyst: BK PIPE GASKETS ROOM 3 BOILER ROOM SOUTH EAST CORNER	ND	70 % CELLULOSE NFM:
Client #: BIO-A086 Micro #: 281877-82 Analyst: BK PIPE GASKETS ROOM 3 BOILER ROOM CENTRAL SOUTH WALL	ND	70 % CELLULOSE NFM:
Client #: BIO-A087 Micro #: 281877-83 Analyst: BK 12" X 12" OFF-WHITE WALL TILES OVER BROWN MASTIC ROOM 1 NORTH WALL	TILE: ND COATING (WHITE): ND MASTIC: ND	90 % CELLULOSE NFM: SYNTHETIC MATERIAL
Client #: BIO-A088 Micro #: 281877-84 Analyst: BK 12" X 12" OFF-WHITE WALL TILES OVER BROWN MASTIC ROOM 1 NORTH WALL	TILE: ND COATING (WHITE): ND MASTIC: ND	90 % CELLULOSE NFM: SYNTHETIC MATERIAL
Client #: BIO-A089 Micro #: 281877-85 Analyst: BK TANK INSULATION ROOM 3 BOILER ROOM	20% AMOSITE ASBESTOS 5% CHRYSOTILE ASBESTOS	NFM: CARBONATE, MISC. PARTICLES

Technical Supervisor: 

Baojia Ke, Ph.D.

6/4/2021

Date Reported

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PROJECT:
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2600 MISSION BELL DRIVE
SAN PABLO, CA

Micro Log In **281877**
 Total Samples 144
 Date Sampled 05/24/2021
 Date Received 06/02/2021
 Date Analyzed

SAMPLE IDENTIFICATION ASBESTOS QUANTITY (AREA %) / TYPES / LAYERS DOMINANT OTHER MATERIALS

If absent, ND Is Reported (No Asbestos Detected)

Client #: BIO-A090 Micro #: 281877-86 Analyst: TANK INSULATION ROOM 3 BOILER ROOM	NOT ANALYZED (PRIOR POSITIVE)	NFM:
Client #: BIO-A091 Micro #: 281877-87 Analyst: TANK INSULATION ROOM 3 BOILER ROOM	NOT ANALYZED (PRIOR POSITIVE)	NFM:
Client #: BIO-A092 Micro #: 281877-88 Analyst: BK WHITE HVAC VIBRATION DAMPENERS - ROOM 26	40% CHRYSOTILE ASBESTOS	60 % SYNTHETIC FIBERS NFM: CARBONATE, MISC. PARTICLES
Client #: BIO-A093 Micro #: 281877-89 Analyst: WHITE HVAC VIBRATION DAMPENERS- ROOM 37	NOT ANALYZED (PRIOR POSITIVE)	NFM:
Client #: BIO-A094 Micro #: 281877-90 Analyst: BK GREEN HVAC VIBRATION DAMPENER ROOM 26	ND	95 % CELLULOSE NFM: MISCELLANEOUS PARTICLES

Technical Supervisor: 

Baojia Ke, Ph.D.

6/4/2021

Date Reported

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PROJECT:
PROJECT NO. PJ63338
BIOLOGICAL SCIENCE BUILDING
CONTRA COSTA COLLEGE
2600 MISSION BELL DRIVE
SAN PABLO, CA

Micro Log In **281877**
 Total Samples 144
 Date Sampled 05/24/2021
 Date Received 06/02/2021
 Date Analyzed 06/02/2021

SAMPLE IDENTIFICATION	ASBESTOS QUANTITY (AREA %) / TYPES / LAYERS If absent, ND is Reported (No Asbestos Detected)	DOMINANT OTHER MATERIALS
Client #: BIO-A095 Micro #: 281877-91 Analyst: BK GREEN HVAC VIBRATION DAMPENER ROOM 37	ND	95 % CELLULOSE NFM: MISCELLANEOUS PARTICLES
Client #: BIO-A096 Micro #: 281877-92 Analyst: BK BLACK MASTIC ON HVAC COILS DRIP PAN ROOM 26	15% CHRYSOTILE ASBESTOS	NFM: TAR
Client #: BIO-A097 Micro #: 281877-93 Analyst: BLACK MASTIC ON HVAC COILS DRIP PAN ROOM 37	NOT ANALYZED (PRIOR POSITIVE)	NFM:
Client #: BIO-A098 Micro #: 281877-94 Analyst: BK WHITE CLOTH HVAC GASKET ON HVAC CONNECTION ROOM 13	80% CHRYSOTILE ASBESTOS	5 % CELLULOSE NFM: BINDER, OTHER, MISCELLANEOUS.
Client #: BIO-A099 Micro #: 281877-95 Analyst: WHITE CLOTH HVAC GASKET ON HVAC CONNECTION ROOM 13	NOT ANALYZED (PRIOR POSITIVE)	NFM:

Technical Supervisor: 

Baojia Ke, Ph.D.

6/4/2021

Date Reported

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PROJECT:
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2600 MISSION BELL DRIVE
SAN PABLO, CA

Micro Log In **281877**
 Total Samples 144
 Date Sampled 05/24/2021
 Date Received 06/02/2021
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SAMPLE IDENTIFICATION	ASBESTOS QUANTITY (AREA %) / TYPES / LAYERS If absent, ND Is Reported (No Asbestos Detected)	DOMINANT OTHER MATERIALS
Client #: BIO-A100 Micro #: 281877-96 Analyst: BK ROOF CURB FLASHING ROOF SOUTH SIDE	TAR WITH GRAVEL: ND FELT: ND BROWN FIBROUS INSULATION: ND	40 % CELLULOSE 5 % FIBROUS GLASS NFM: TAR/ASPHALT, BINDER
Client #: BIO-A101 Micro #: 281877-97 Analyst: BK ROOF CURB FLASHING ROOF WEST SIDE NORTH END	TAR WITH GRAVEL: ND FELT: ND BROWN FIBROUS INSULATION: ND	40 % CELLULOSE 5 % FIBROUS GLASS NFM: TAR/ASPHALT, BINDER
Client #: BIO-A102 Micro #: 281877-98 Analyst: BK AF GRAY / BLACK ROOF PENETRATION MASTIC ROOF EXHAUST PENETRATION FLUE	ND	10 % CELLULOSE NFM: TAR/ASPHALT, BINDER
Client #: BIO-A103 Micro #: 281877-99 Analyst: BK GRAY / BLACK ROOF PENETRATION MASTIC ROOF EXHAUST PENETRATION FLUE	ND	10 % CELLULOSE NFM: TAR/ASPHALT, BINDER
Client #: BIO-A104 Micro #: 281877-100 Analyst: BK OFF-WHITE INSULATION ON PIPE BRACKET SUPPORT ROOF SOUTHWEST CORNER CHILLED WATER RETURN LINE	ND	30 % CELLULOSE NFM: CARBONATE, MISC. PARTICLES

Technical Supervisor: 

Baojia Ke, Ph.D.

6/4/2021

Date Reported

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 Date Received 06/02/2021
 Date Analyzed 06/03/2021

SAMPLE IDENTIFICATION	ASBESTOS QUANTITY (AREA %) / TYPES / LAYERS If absent, ND Is Reported (No Asbestos Detected)	DOMINANT OTHER MATERIALS
Client #: BIO-A105 Micro #: 281877-101 Analyst: JM OFF-WHITE INSULATION ON PIPE BRACKET SUPPORT ROOF WEST SIDE OF HVAC UNIT	ND	15 % CELLULOSE 5 % FIBROUS GLASS NFM: CARBONATE, MISC. PARTICLES
Client #: BIO-A106 Micro #: 281877-102 Analyst: JM GRAY HVAC SEAM MASTIC ROOF CENTRAL FROM OLD HVAC	MASTIC: ND PAINT (SILVER): 8% CHRYSOTILE ASBESTOS MESH: ND	15 % CELLULOSE 5 % FIBROUS GLASS NFM: CARBONATE, MISC. PARTICLES
Client #: BIO-A107 Micro #: 281877-103 Analyst: GRAY HVAC SEAM MASTIC ROOF SOUTHEAST CORNER FROM OLD HVAC	NOT ANALYZED (PRIOR POSITIVE)	NFM:
Client #: BIO-A108 Micro #: 281877-104 Analyst: JM GRAY ROLLED ROOF PATCH ROOF SOUTHEAST CORNER	SHINGLE: ND TAR: ND CELLULOSE FELT: ND	25 % CELLULOSE 5 % FIBROUS GLASS NFM: TAR/ASPHALT, BINDER
Client #: BIO-A109 Micro #: 281877-105 Analyst: JM GRAY ROLLED ROOF PATCH ROOF NORTH SIDE	SHINGLE: ND TAR: ND CELLULOSE FELT: ND	25 % CELLULOSE 5 % FIBROUS GLASS NFM: TAR/ASPHALT, BINDER

Technical Supervisor: 

Baojia Ke, Ph.D.

6/4/2021

Date Reported

NVLAP Lab Code 101872-0 (TESTING). Analyses use Polarized Light Microscopy (PLM), Micro Analytical SOP PLM-101. Basic techniques follow EPA – Appendix E to Subpart E of 40 CFR Part 763; Interim Method for the Determination of Asbestos in Bulk Insulation Samples" (originally published 1982), and EPA-600/R93-116 (1993). The 1993 method covers all types of bulk materials and is based on the 1982 Method, with improved analytical techniques for layered samples as required for NESHAP compliance. Asbestos is quantified by calibrated visual estimation. Detection limit is material dependent. Detection of asbestos traces (much less than 1%) may not be reliable or reproducible by PLM. Weight % cannot be determined by PLM. Asbestos with diameter below ~1 µm may not be detected by PLM. Absence of asbestos in dust, debris, and some compact materials, including floor tiles, cannot be conclusively established by PLM, and should be confirmed by Transmission Electron Microscopy (TEM). Interferences may prevent detection of small asbestos fibers, and hinder determination of some optical properties. Tremolite-asbestos or actinolite-asbestos may be indistinguishable by PLM from some similar, non-regulated amphiboles (e.g. the "Libby Amphiboles" richterite and winchite), and should be confirmed by TEM. The lower quantitation limit (reporting limit) of PLM estimation is 1%. The Cal-OSHA definition of asbestos-containing construction material is 0.1% asbestos; however, reliable determination of asbestos percent at this level cannot be done by PLM estimation; PLM Point Counting or TEM weight percent analysis are recommended. Only dominant non-asbestos materials (fibrous and non-fibrous) are listed. This analysis shall not be construed as conclusive for the presence of any reported materials other than asbestos, or for the absence of any non-asbestos material. Common interferences include, but are not limited to: cellulose, fibrous glass, other man-made vitreous fibers, synthetic fibers, elongate fragments of calcium sulfate, talc, wollastonite, animal hair, and other miscellaneous elongate particles. Sample heterogeneity is indicated by listing more than one distinct layer or material on the report. If more than one distinct sample is received in the same container, samples shall be marked with letters and analyzed separately. Layers within a sample are analyzed separately when feasible; if asbestos is detected, percentages are reported for individual layers. Interlayer contamination is possible among any layers in a sample. The notation ND (or "NONE DETECTED") indicates a result of "NO ASBESTOS DETECTED" in a homogeneous sample, or in a layer of a heterogeneous sample. Composite asbestos percentages from multiple layers are applicable only to wallboard / joint compound systems; compositing is based on customers' descriptions of material as "joint compound". Customers are solely responsible for identification and description of bulk materials listed on field forms. Laboratory descriptions may differ from those given by customers. Quality Control (QC): all results have been determined to be within acceptance limits prior to reporting. Reanalyzed samples are denoted by two sets of analyst initials. Unless otherwise stated herein, all samples were received in acceptable condition for analysis. This report must not be used to claim product endorsement by NIST or any U.S. Government agency. This report shall not be reproduced except in full, without the approval of Micro Analytical Laboratories, Inc., and pertains only to the samples analyzed as received. NFM = Non-fibrous materials.

MICRO ANALYTICAL LABORATORIES, INC.
BULK ASBESTOS ANALYSIS - POLARIZED LIGHT MICROSCOPY (PLM)



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PROJECT:
PROJECT NO. PJ63338
BIOLOGICAL SCIENCE BUILDING
CONTRA COSTA COLLEGE
2600 MISSION BELL DRIVE
SAN PABLO, CA

Micro Log In **281877**
 Total Samples 144
 Date Sampled 05/24/2021
 Date Received 06/02/2021
 Date Analyzed 06/03/2021

SAMPLE IDENTIFICATION	ASBESTOS QUANTITY (AREA %) / TYPES / LAYERS If absent, ND Is Reported (No Asbestos Detected)	DOMINANT OTHER MATERIALS
Client #: BIO-A110 Micro #: 281877-106 Analyst: JM GRAY ROOF MASTIC ON GRAY ROLLED ROOF PATCHES ROOF SOUTHEAST CORNER	ND	20 % CELLULOSE 5 % FIBROUS GLASS NFM: TAR/ASPHALT, BINDER
Client #: BIO-A111 Micro #: 281877-107 Analyst: JM GRAY ROOF MASTIC ON GRAY ROLLED ROOF PATCHES ROOF SOUTHEAST CORNER	ND	20 % CELLULOSE 5 % FIBROUS GLASS NFM: TAR/ASPHALT, BINDER
Client #: BIO-A112 Micro #: 281877-108 Analyst: JM DARK GRAY SEALANT ON GENERATOR EXHAUST DUCT FAN ROOF SOUTHEAST CORNER	2% CHRYSOTILE ASBESTOS	NFM: RESILIENT ORGANICALLY BOUND MATERIALS, MISC. PARTICLES
Client #: BIO-A113 Micro #: 281877-109 Analyst: DARK GRAY SEALANT ON GENERATOR EXHAUST DUCT FAN ROOF SOUTHEAST CORNER	NOT ANALYZED (PRIOR POSITIVE)	NFM:
Client #: BIO-A114 Micro #: 281877-110 Analyst: JM LIGHT GRAY HVAC SEAM MASTIC ROOF FROM NEWER HVAC UNIT DUCT	ND	NFM: RESILIENT ORGANICALLY BOUND MATERIALS, MISC. PARTICLES

Technical Supervisor: 

Baojia Ke, Ph.D.

6/4/2021

Date Reported

NVLAP Lab Code 101872-0 (TESTING). Analyses use Polarized Light Microscopy (PLM), Micro Analytical SOP PLM-101. Basic techniques follow EPA - Appendix E to Subpart E of 40 CFR Part 763; interim Method for the Determination of Asbestos in Bulk Insulation Samples" (originally published 1982), and EPA-600/R93-116 (1993). The 1993 method covers all types of bulk materials and is based on the 1982 Method, with improved analytical techniques for layered samples as required for NESHAP compliance. Asbestos is quantified by calibrated visual estimation. Detection limit is material dependent. Detection of asbestos traces (much less than 1%) may not be reliable or reproducible by PLM. Weight % cannot be determined by PLM. Asbestos with diameter below ~1 µm may not be detected by PLM. Absence of asbestos in dust, debris, and some compact materials, including floor tiles, cannot be conclusively established by PLM, and should be confirmed by Transmission Electron Microscopy (TEM). Interferences may prevent detection of small asbestos fibers, and hinder determination of some optical properties. Tremolite-asbestos or actinolite-asbestos may be indistinguishable by PLM from some similar, non-regulated amphiboles (e.g. the "Libby Amphiboles" richterite and winchite), and should be confirmed by TEM. The lower quantitation limit (reporting limit) of PLM estimation is 1%. The Cal-OSHA definition of asbestos-containing construction material is 0.1% asbestos; however, reliable determination of asbestos percent at this level cannot be done by PLM estimation; PLM Point Counting or TEM weight percent analysis are recommended. Only dominant non-asbestos materials (fibrous and non-fibrous) are listed. This analysis shall not be construed as conclusive for the presence of any reported materials other than asbestos, or for the absence of any non-asbestos material. Common interferences include, but are not limited to: cellulose, fibrous glass, other man-made vitreous fibers, synthetic fibers, elongate fragments of calcium sulfate, talc, wollastonite, animal hair, and other miscellaneous elongate particles. Sample heterogeneity is indicated by listing more than one distinct layer or material on the report. If more than one distinct sample is received in the same container, samples shall be marked with letters and analyzed separately. Layers within a sample are analyzed separately when feasible; if asbestos is detected, percentages are reported for individual layers. Interlayer contamination is possible among any layers in a sample. The notation ND (or "NONE DETECTED") indicates a result of "NO ASBESTOS DETECTED" in a homogeneous sample, or in a layer of a heterogeneous sample. Composite asbestos percentages from multiple layers are applicable only to wallboard / joint compound systems; compositing is based on customers' descriptions of material as "joint compound". Customers are solely responsible for identification and description of bulk materials listed on field forms. Laboratory descriptions may differ from those given by customers. Quality Control (QC): all results have been determined to be within acceptance limits prior to reporting. Reanalyzed samples are denoted by two sets of analyst initials. Unless otherwise stated herein, all samples were received in acceptable condition for analysis. This report must not be used to claim product endorsement by NIST or any U.S. Government agency. This report shall not be reproduced except in full, without the approval of Micro Analytical Laboratories, Inc., and pertains only to the samples analyzed as received. NFM = Non-fibrous materials.

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BULK ASBESTOS ANALYSIS - POLARIZED LIGHT MICROSCOPY (PLM)



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PROJECT:
PROJECT NO. PJ63338
BIOLOGICAL SCIENCE BUILDING
CONTRA COSTA COLLEGE
2600 MISSION BELL DRIVE
SAN PABLO, CA

Micro Log In **281877**
 Total Samples 144
 Date Sampled 05/24/2021
 Date Received 06/02/2021
 Date Analyzed 06/03/2021

SAMPLE IDENTIFICATION

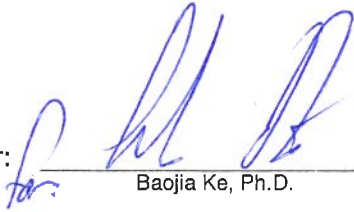
ASBESTOS QUANTITY (AREA %) / TYPES / LAYERS

DOMINANT
OTHER MATERIALS

If absent, ND is Reported (No Asbestos Detected)

Client #: BIO-A115 Micro #: 281877-111 Analyst: JM LIGHT GRAY HVAC SEAM MASTIC ROOF FROM NEWER HVAC UNIT DUCT	ND	NFM: RESILIENT ORGANICALLY BOUND MATERIALS, MISC. PARTICLES
Client #: BIO-A116 Micro #: 281877-112 Analyst: JM DARK GRAY HVAC SEAM MASTIC ROOF SOUTHWEST CORNER OF HVAC UNIT	ND	NFM: RESILIENT ORGANICALLY BOUND MATERIALS, MISC. PARTICLES
Client #: BIO-A117 Micro #: 281877-113 Analyst: JM DARK GRAY HVAC SEAM MASTIC ROOF NORTHWEST CORNER OF HVAC UNIT	ND	2% CELLULOSE NFM: RESILIENT ORGANICALLY BOUND MATERIALS, MISC. PARTICLES
Client #: BIO-A118 Micro #: 281877-114 Analyst: JM BEIGE SEALANT ON EXHAUST FAN SEAM ROOF NORTHWEST FROM OLD HVAC VENT	ND	NFM: RESILIENT ORGANICALLY BOUND MATERIALS, MISC. PARTICLES
Client #: BIO-A119 Micro #: 281877-115 Analyst: JM BEIGE SEALANT ON EXHAUST FAN SEAM ROOF NORTHWEST FROM OLD HVAC VENT	ND	NFM: RESILIENT ORGANICALLY BOUND MATERIALS, MISC. PARTICLES

Technical Supervisor:


 Baojia Ke, Ph.D.

6/4/2021

Date Reported

NVLAP Lab Code 101872-0 (TESTING). Analyses use Polarized Light Microscopy (PLM), Micro Analytical SOP PLM-101. Basic techniques follow EPA - Appendix E to Subpart E of 40 CFR Part 763; Interim Method for the Determination of Asbestos in Bulk Insulation Samples" (originally published 1982), and EPA-600/R93-116 (1993). The 1993 method covers all types of bulk materials and is based on the 1982 Method, with improved analytical techniques for layered samples as required for NESHAP compliance. Asbestos is quantified by calibrated visual estimation. Detection limit is material dependent. Detection of asbestos traces (much less than 1%) may not be reliable or reproducible by PLM. Weight % cannot be determined by PLM. Asbestos with diameter below ~1 µm may not be detected by PLM. Absence of asbestos in dust, debris, and some compact materials, including floor tiles, cannot be conclusively established by PLM, and should be confirmed by Transmission Electron Microscopy (TEM). Interferences may prevent detection of small asbestos fibers, and hinder determination of some optical properties. Tremolite-asbestos or actinolite-asbestos may be indistinguishable by PLM from some similar, non-regulated amphiboles (e.g. the "Libby Amphiboles" richterite and winchite), and should be confirmed by TEM. The lower quantitation limit (reporting limit) of PLM estimation is 1%. The Cal-OSHA definition of asbestos-containing construction material is 0.1% asbestos; however, reliable determination of asbestos percent at this level cannot be done by PLM estimation; PLM Point Counting or TEM weight percent analysis are recommended. Only dominant non-asbestos materials (fibrous and non-fibrous) are listed. This analysis shall not be construed as conclusive for the presence of any reported materials other than asbestos, or for the absence of any non-asbestos material. Common interferences include, but are not limited to: cellulose, fibrous glass, other man-made vitreous fibers, synthetic fibers, elongate fragments of calcium sulfate, talc, wollastonite, animal hair, and other miscellaneous elongate particles. Sample heterogeneity is indicated by listing more than one distinct layer or material on the report. If more than one distinct sample is received in the same container, samples shall be marked with letters and analyzed separately. Layers within a sample are analyzed separately when feasible; if asbestos is detected, percentages are reported for individual layers. Interlayer contamination is possible among any layers in a sample. The notation ND (or "NONE DETECTED") indicates a result of "NO ASBESTOS DETECTED" in a homogeneous sample, or in a layer of a heterogeneous sample. Composite asbestos percentages from multiple layers are applicable only to wallboard / joint compound systems; compositing is based on customers' descriptions of material as "joint compound". Customers are solely responsible for identification and description of bulk materials listed on field forms. Laboratory descriptions may differ from those given by customers. Quality Control (QC): all results have been determined to be within acceptance limits prior to reporting. Reanalyzed samples are denoted by two sets of analyst initials. Unless otherwise stated herein, all samples were received in acceptable condition for analysis. This report must not be used to claim product endorsement by NIST or any U.S. Government agency. This report shall not be reproduced except in full, without the approval of Micro Analytical Laboratories, Inc., and pertains only to the samples analyzed as received. NFM = Non-fibrous materials.

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BULK ASBESTOS ANALYSIS - POLARIZED LIGHT MICROSCOPY (PLM)



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PROJECT:
PROJECT NO. PJ63338
BIOLOGICAL SCIENCE BUILDING
CONTRA COSTA COLLEGE
2600 MISSION BELL DRIVE
SAN PABLO, CA

Micro Log In **281877**
 Total Samples 144
 Date Sampled 05/24/2021
 Date Received 06/02/2021
 Date Analyzed 06/03/2021

SAMPLE IDENTIFICATION	ASBESTOS QUANTITY (AREA %) / TYPES / LAYERS If absent, ND Is Reported (No Asbestos Detected)	DOMINANT OTHER MATERIALS
Client #: BIO-A120 Micro #: 281877-116 Analyst: JM SILVER ALUMINUM WITH BLACK ADHESIVE DUCT LINING NORTHWEST FROM OLD HVAC VENT	ALUMINUM: ND ADHESIVE (BLACK): ND	NFM: RESILIENT ORGANICALLY BOUND MATERIALS, MISC. PARTICLES
Client #: BIO-A121 Micro #: 281877-117 Analyst: JM SILVER ALUMINUM WITH BLACK ADHESIVE DUCT LINING NORTHWEST FROM OLD HVAC VENT	ALUMINUM: ND ADHESIVE (BLACK): ND	NFM: RESILIENT ORGANICALLY BOUND MATERIALS, MISC. PARTICLES
Client #: BIO-A124 Micro #: 281877-118 Analyst: JM BLACK COATING ON ROOF ACCESS LADDER ROOM 3 BOILER ROOM NORTHEAST CORNER	ND	NFM: RESILIENT ORGANICALLY BOUND MATERIALS, MISC. PARTICLES
Client #: BIO-A115 Micro #: 281877-119 Analyst: JM BLACK COATING ON ROOF ACCESS LADDER ROOM 3 BOILER ROOM NORTHEAST CORNER	ND	NFM: RESILIENT ORGANICALLY BOUND MATERIALS, MISC. PARTICLES
Client #: BIO-A126 Micro #: 281877-120 Analyst: SS AF STUCCO EXT. NORTH AT ENTRY SOFFIT CEILING	STUCCO: ND SKIM COAT: < 1% CHRYSOTILE ASBESTOS	NFM: ROCK FRAGMENTS, CARBONATE, BINDER

Technical Supervisor: 

Baojia Ke, Ph.D.

6/4/2021

Date Reported

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BULK ASBESTOS ANALYSIS - POLARIZED LIGHT MICROSCOPY (PLM)



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PROJECT:
PROJECT NO. PJ63338
BIOLOGICAL SCIENCE BUILDING
CONTRA COSTA COLLEGE
2600 MISSION BELL DRIVE
SAN PABLO, CA

Micro Log In **281877**
 Total Samples 144
 Date Sampled 05/24/2021
 Date Received 06/02/2021
 Date Analyzed 06/03/2021.

SAMPLE IDENTIFICATION	ASBESTOS QUANTITY (AREA %) / TYPES / LAYERS	DOMINANT OTHER MATERIALS
	If absent, ND is Reported (No Asbestos Detected)	

Client #: BIO-A127		
Micro #: 281877-121 Analyst: SS AF STUCCO SOUTH AT ENTRY SOFFIT	STUCCO: ND SKIM COAT: < 1% CHRYSOTILE ASBESTOS	NFM: ROCK FRAGMENTS, CARBONATE, BINDER
Client #: BIO-A128		
Micro #: 281877-122 Analyst: AF STUCCO EXT. SOUTH AT ENTRY SOFFIT	STUCCO: ND SKIM COAT: < 1% CHRYSOTILE ASBESTOS	NFM: ROCK FRAGMENTS, CARBONATE, BINDER
Client #: BIO-A129		
Micro #: 281877-123 Analyst: SS CONCRETE SLAB ROOM 22	ND	NFM: ROCK FRAGMENTS, CARBONATE, BINDER
Client #: BIO-A130		
Micro #: 281877-124 Analyst: SS CONCRETE SLAB ROOM 4 BOILER ROOM	ND	NFM: ROCK FRAGMENTS, CARBONATE, BINDER
Client #: BIO-A131		
Micro #: 281877-125 Analyst: SS CONCRETE SLAB EXT. WEST SIDED SOUTH END	2% CHRYSOTILE ASBESTOS	NFM: ROCK FRAGMENTS, CARBONATE, BINDER

Technical Supervisor: 

Baojia Ke, Ph.D.

6/4/2021

Date Reported

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SAN PABLO, CA

Micro Log In **281877**
 Total Samples 144
 Date Sampled 05/24/2021
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 Date Analyzed 06/03/2021

SAMPLE IDENTIFICATION	ASBESTOS QUANTITY (AREA %) / TYPES / LAYERS	DOMINANT OTHER MATERIALS
If absent, ND is Reported (No Asbestos Detected)		
Client #: BIO-A132 Micro #: 281877-126 Analyst: SS AF WHITE CAULK PUTTY LIKE EXT. SOUTH SIDE AT ENTRY BETWEEN BRICK AND METAL WINDOW FRAME	ND	25 % TALC NFM: CARBONATE, BINDER.
Client #: BIO-A133 Micro #: 281877-127 Analyst: SS WHITE CAULK PUTTY LIKE EXT. NORTH SIDE AT ENTRY BETWEEN BRICK AND METAL WINDOW FRAME	ND	25 % TALC NFM: CARBONATE, BINDER.
Client #: BIO-A134 Micro #: 281877-128 Analyst: SS LIGHT GRAY CAULK EXT. EAST SIDE SOUTH END BETWEEN GLASS AND WINDOW FRAME	2% CHRYSOTILE ASBESTOS	2 % TALC NFM: CARBONATE, BINDER.
Client #: BIO-A135 Micro #: 281877-129 Analyst: LIGHT GRAY CAULK EXT. WEST SIDE NORTH END BETWEEN GLASS AND WINDOW FRAME	NOT ANALYZED (PRIOR POSITIVE)	NFM:
Client #: BIO-A136 Micro #: 281877-130 Analyst: SS DUCT WRAP OVER FIBERGLASS ROOM 26	INSULATION: ND MESH: ND	12 % CELLULOSE 85 % FIBROUS GLASS NFM: GLASS FRAGMENTS, BINDER.

Technical Supervisor: 

Baojia Ke, Ph.D.

6/4/2021

Date Reported

NVLAP Lab Code 101872-0 (TESTING). Analyses use Polarized Light Microscopy (PLM), Micro Analytical SOP PLM-101. Basic techniques follow EPA - Appendix E to Subpart E of 40 CFR Part 763; Interim Method for the Determination of Asbestos in Bulk Insulation Samples" (originally published 1982, and EPA-600/R93-116 (1993). The 1993 method covers all types of bulk materials and is based on the 1982 Method, with improved analytical techniques for layered samples as required for NESHAP compliance. Asbestos is quantified by calibrated visual estimation. Detection limit is material dependent. Detection of asbestos traces (much less than 1%) may not be reliable or reproducible by PLM. Weight % cannot be determined by PLM. Asbestos with diameter below ~1 µm may not be detected by PLM. Absence of asbestos in dust, debris, and some compact materials, including floor tiles, cannot be conclusively established by PLM, and should be confirmed by Transmission Electron Microscopy (TEM). Interferences may prevent detection of small asbestos fibers, and hinder determination of some optical properties. Tremolite-asbestos or actinolite-asbestos may be indistinguishable by PLM from some similar, non-regulated amphiboles (e.g. the "Libby Amphiboles" richterite and winchite), and should be confirmed by TEM. The lower quantitation limit (reporting limit) of PLM estimation is 1%. The Cal-OSHA definition of asbestos-containing construction material is 0.1% asbestos; however, reliable determination of asbestos percent at this level cannot be done by PLM estimation; PLM Point Counting or TEM weight percent analysis are recommended. Only dominant non-asbestos materials (fibrous and non-fibrous) are listed. This analysis shall not be construed as conclusive for the presence of any reported materials other than asbestos, or for the absence of any non-asbestos material. Common interferences include, but are not limited to: cellulose, fibrous glass, other man-made vitreous fibers, synthetic fibers, elongate fragments of calcium sulfate, talc, wollastonite, animal hair, and other miscellaneous elongate particles. Sample heterogeneity is indicated by listing more than one distinct layer or material on the report. If more than one distinct sample is received in the same container, samples shall be marked with letters and analyzed separately. Layers within a sample are analyzed separately when feasible; if asbestos is detected, percentages are reported for individual layers. Interlayer contamination is possible among any layers in a sample. The notation ND (or "NONE DETECTED") indicates a result of "NO ASBESTOS DETECTED" in a homogeneous sample, or in a layer of a heterogeneous sample. Composite asbestos percentages from multiple layers are applicable only to wallboard / joint compound systems; compositing is based on customers' descriptions of material as "joint compound". Customers are solely responsible for identification and description of bulk materials listed on field forms. Laboratory descriptions may differ from those given by customers. Quality Control (QC): all results have been determined to be within acceptance limits prior to reporting. Reanalyzed samples are denoted by two sets of analyst initials. Unless otherwise stated herein, all samples were received in acceptable condition for analysis. This report must not be used to claim product endorsement by NIST or any U.S. Government agency. This report shall not be reproduced except in full, without the approval of Micro Analytical Laboratories, Inc., and pertains only to the samples analyzed as received. NFM = Non-fibrous materials.

MICRO ANALYTICAL LABORATORIES, INC.
BULK ASBESTOS ANALYSIS - POLARIZED LIGHT MICROSCOPY (PLM)



1212
 Gary Lowe
 Forensic Analytical Consulting
 21228 Cabot Boulevard
 Hayward, CA 94545

PROJECT:
PROJECT NO. PJ63338
BIOLOGICAL SCIENCE BUILDING
CONTRA COSTA COLLEGE
2600 MISSION BELL DRIVE
SAN PABLO, CA

Micro Log In **281877**
 Total Samples 144
 Date Sampled 05/24/2021
 Date Received 06/02/2021
 Date Analyzed 06/03/2021

SAMPLE IDENTIFICATION**ASBESTOS QUANTITY (AREA %) / TYPES / LAYERS****DOMINANT
OTHER MATERIALS**

If absent, ND is Reported (No Asbestos Detected)

Client #: BIO-A137			
Micro #: 281877-131 DUCT WRAP OVER FIBERGLASS ROOM 37	Analyst: SS	INSULATION: ND MESH: ND	12 % CELLULOSE 85 % FIBROUS GLASS NFM: GLASS FRAGMENTS, BINDER.
Client #: BIO-A138			
Micro #: 281877-132 DUCT WRAP OVER FIBERGLASS ROOM 13	Analyst: SS	INSULATION: ND MESH: ND	10 % CELLULOSE 85 % FIBROUS GLASS NFM: GLASS FRAGMENTS, BINDER.
Client #: BIO-A139			
Micro #: 281877-133 TAR AND GRAVEL ROOF FIELD ROOF SOUTHEAST CORNER	Analyst: SS	TAR / GRAVEL: ND GLOSSY TAR: ND	15 % CELLULOSE 5 % FIBROUS GLASS NFM: TAR/ASPHALT, BINDER
Client #: BIO-A140			
Micro #: 281877-134 TAR AND GRAVEL ROOF FIELD ROOF CENTRAL	Analyst: SS	TAR / GRAVEL: ND GLOSSY TAR: ND	15 % CELLULOSE 5 % FIBROUS GLASS NFM: TAR/ASPHALT, BINDER
Client #: BIO-A141			
Micro #: 281877-135 TAR AND GRAVEL ROOF FIELD ROOF NORTH SIDE	Analyst: SS	TAR / GRAVEL: ND GLOSSY TAR: ND	15 % CELLULOSE 5 % FIBROUS GLASS NFM: TAR/ASPHALT, BINDER

Technical Supervisor: 

Baojia Ke, Ph.D.

6/4/2021

Date Reported

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MICRO ANALYTICAL LABORATORIES, INC.

BULK ASBESTOS ANALYSIS - POLARIZED LIGHT MICROSCOPY (PLM)



1212
Gary Lowe
Forensic Analytical Consulting
21228 Cabot Boulevard
Hayward, CA 94545

PROJECT:
PROJECT NO. PJ63338
BIOLOGICAL SCIENCE BUILDING
CONTRA COSTA COLLEGE
2600 MISSION BELL DRIVE
SAN PABLO, CA

Micro Log In **281877**
Total Samples 144
Date Sampled 05/24/2021
Date Received 06/02/2021
Date Analyzed 06/03/2021

SAMPLE IDENTIFICATION	ASBESTOS QUANTITY (AREA %) / TYPES / LAYERS	DOMINANT OTHER MATERIALS
If absent, ND is Reported (No Asbestos Detected)		

Client #: BIO-A142 Micro #: 281877-136 Analyst: SS PIPE LAGGING (JACKET) OVER FIBERGLASS ON 4" OD PIPE RUN ROOM 41	INSULATION: ND MESH / COATING: ND	15 % CELLULOSE 80 % FIBROUS GLASS NFM: BINDER, OTHER, MISCELLANEOUS.
Client #: BIO-A143 Micro #: 281877-137 Analyst: SS PIPE LAGGING (JACKET) OVER FIBERGLASS ON 4" OD PIPE RUN ROOM 17	INSULATION: ND MESH / COATING: ND	15 % CELLULOSE 80 % FIBROUS GLASS NFM: BINDER, OTHER, MISCELLANEOUS.
Client #: BIO-A144 Micro #: 281877-138 Analyst: SS PIPE LAGGING (JACKET) OVER FIBERGLASS ON 4" OD PIPE RUN ROOM 43	INSULATION: ND MESH / COATING: ND	15 % CELLULOSE 80 % FIBROUS GLASS NFM: BINDER, OTHER, MISCELLANEOUS.
Client #: BIO-A145 Micro #: 281877-139 Analyst: SS 1" X 1" GRAY CERAMIC FLOOR TILE WITH GRAY GROUT OFF-WHITE MORTAR MEN'S RESTROOM	CERAMIC TILE: ND GROUT: ND MORTAR: ND	NFM: ROCK FRAGMENTS, CARBONATE, BINDER
Client #: BIO-A146 Micro #: 281877-140 Analyst: SS 1" X 1" GRAY CERAMIC FLOOR TILE WITH GRAY GROUT OFF-WHITE MORTAR MEN'S RESTROOM	CERAMIC TILE: ND GROUT: ND MORTAR: ND	NFM: ROCK FRAGMENTS, CARBONATE, BINDER

Technical Supervisor: Baojia Ke, Ph.D.

6/4/2021

Date Reported

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BULK ASBESTOS ANALYSIS - POLARIZED LIGHT MICROSCOPY (PLM)



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 Hayward, CA 94545

PROJECT:
PROJECT NO. PJ63338
BIOLOGICAL SCIENCE BUILDING
CONTRA COSTA COLLEGE
2600 MISSION BELL DRIVE
SAN PABLO, CA

Micro Log In **281877**
 Total Samples 144
 Date Sampled 05/24/2021
 Date Received 06/02/2021
 Date Analyzed 06/03/2021

SAMPLE IDENTIFICATION	ASBESTOS QUANTITY (AREA %) / TYPES / LAYERS	DOMINANT OTHER MATERIALS
	If absent, ND is Reported (No Asbestos Detected)	

Client #: BIO-A147 Micro #: 281877-141 Analyst: SS OFF-WHITE HVAC SEAM TAPE EAST ROOM 39	COATING (WHITE): ND MESH: ND	30 % CELLULOSE NFM: CARBONATE, BINDER.
Client #: BIO-A148 Micro #: 281877-142 Analyst: SS OFF-WHITE HVAC SEAM TAPE ROOM 21	COATING (WHITE): ND MESH: ND	30 % CELLULOSE NFM: CARBONATE, BINDER.
Client #: BIO-A149 Micro #: 281877-143 Analyst: SS BLACK MOISTURE BARRIER EXT. EAST SIDE SOUTH END BEHIND UPPER WALL WOOD PANEL	CELLULOSE / TAR: ND	45 % CELLULOSE NFM: TAR BINDER
Client #: BIO-A150 Micro #: 281877-144 Analyst: SS BLACK MOISTURE BARRIER EXT. EAST SIDE SOUTH END BEHIND UPPER WALL WOOD PANEL	CELLULOSE / TAR: ND	45 % CELLULOSE NFM: TAR BINDER

Technical Supervisor: 

Baojia Ke, Ph.D.

6/4/2021

Date Reported

NVLAP Lab Code 101872-0 (TESTING). Analyses use Polarized Light Microscopy (PLM), Micro Analytical SOP PLM-101. Basic techniques follow EPA - Appendix E to Subpart E of 40 CFR Part 763; Interim Method for the Determination of Asbestos in Bulk Insulation Samples" (originally published 1982), and EPA-600/R93-116 (1993). The 1993 method covers all types of bulk materials and is based on the 1982 Method, with improved analytical techniques for layered samples as required for NESHAP compliance. Asbestos is quantified by calibrated visual estimation. Detection limit is material dependent. Detection of asbestos traces (much less than 1%) may not be reliable or reproducible by PLM. Weight % cannot be determined by PLM. Asbestos with diameter below ~1 µm may not be detected by PLM. Absence of asbestos in dust, debris, and some compact materials, including floor tiles, cannot be conclusively established by PLM, and should be confirmed by Transmission Electron Microscopy (TEM). Interferences may prevent detection of small asbestos fibers, and hinder determination of some optical properties. Tremolite-asbestos or actinolite-asbestos may be indistinguishable by PLM from some similar, non-regulated amphiboles (e.g. the "Libby Amphiboles" richterite and winchite), and should be confirmed by TEM. The lower quantitation limit (reporting limit) of PLM estimation is 1%. The Cal-OSHA definition of asbestos-containing construction material is 0.1% asbestos; however, reliable determination of asbestos percent at this level cannot be done by PLM estimation; PLM Point Counting or TEM weight percent analysis are recommended. Only dominant non-asbestos materials (fibrous and non-fibrous) are listed. This analysis shall not be construed as conclusive for the presence of any reported materials other than asbestos, or for the absence of any non-asbestos material. Common interferences include, but are not limited to: cellulose, fibrous glass, other man-made vitreous fibers, synthetic fibers, elongate fragments of calcium sulfate, talc, wollastonite, animal hair, and other miscellaneous elongate particles. Sample heterogeneity is indicated by listing more than one distinct layer or material on the report. If more than one distinct sample is received in the same container, samples shall be marked with letters and analyzed separately. Layers within a sample are analyzed separately when feasible; if asbestos is detected, percentages are reported for individual layers. Interlayer contamination is possible among any layers in a sample. The notation ND (or "NONE DETECTED") indicates a result of "NO ASBESTOS DETECTED" in a homogeneous sample, or in a layer of a heterogeneous sample. Composite asbestos percentages from multiple layers are applicable only to wallboard / joint compound systems; compositing is based on customers' descriptions of material as "joint compound". Customers are solely responsible for identification and description of bulk materials listed on field forms. Laboratory descriptions may differ from those given by customers. Quality Control (QC): all results have been determined to be within acceptance limits prior to reporting. Reanalyzed samples are denoted by two sets of analyst initials. Unless otherwise stated herein, all samples were received in acceptable condition for analysis. This report must not be used to claim product endorsement by NIST or any U.S. Government agency. This report shall not be reproduced except in full, without the approval of Micro Analytical Laboratories, Inc., and pertains only to the samples analyzed as received. NFM = Non-fibrous materials.

Sampling Data Form / Chain of custody

NOTE Stop @ first positive!!

281877

Client: HAY01

Site: Contra Costa College 2600 Mission Bell Drive San Pablo, CA USA

Sampled By: M.A.

FACS: San Francisco, CA Office

Critical Solutions, Inc.

(Biological Science Bldg)

PO02886

Sample Date: 05/24/21 - 05/28/21


Proj #: PJ63338

Turnaround Time:	RUSH	24hr	48hr	Extended (<u>5</u> days)
Analysis:	<input checked="" type="checkbox"/> PLM Standard:	<input type="checkbox"/> PLM w/ Point Count: (<u> </u> 400pt. <u> </u> 1,000 pt.):		
Email results to:	FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com & malwareza@forensicanalytical.com			

NOTE Stop @ first positive!!

HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I./Cat II.	Condition	Sample #	Sample Location	Lab result
01	TAN sheet flooring w/ mottle pattern		Y	G	Bio-A001	RM 18, SE. Corner	1
↓	↓		↓	↓	-A002	RM 7, NW Corner	2
02	Beige sheet flooring w/ mottle pattern		↓	↓	-A003	RM 18, West Side, Patches on floor	3
↓	↓		↓	↓	-A004	RM 2, East side	4
04	white Adhesive (on metal HVAC pins)		N	↓	-A005	RM 16	5
↓	↓		↓	↓	-A006	RM 16	6
05	Gray HVAC Sealant mastic		↓	↓	-A007	RM 16	7
↓	↓		↓	↓	-A008	RM 7	8

DW = Drywall, JC = Joint Compound, WT=Wall Texture, VFT = Vinyl Floor Tile, VSF = Vinyl Sheet Flooring, BB = Baseboard, BBM = Baseboard Mastic, CM = Carpet Mastic, ACT = Acoustic Ceiling Tile, ACS = Sprayed-on Acoustic Ceiling Material, FP = Fireproofing, PI = Pipe Insulation, PFI = Pipe fitting insulation, WP = Plaster, CP = Ceiling Plaster, ES = Exterior Stucco

Relinquished by:  Date and Time: 05/21/21	Relinquished by: Date and Time:	Relinquished by: Date and Time:
Received by: Kao Saitel Date and Time: 6/2/2011	Received by: Date and Time:	Received by: Date and Time:

Sampling Data Form / Chain of custody

28/877

Client: HAY01

Site: Contra Costa College 2600 Mission Bell Drive San Pablo, CA USA

Sampled By: M.A.

FACS: San Francisco, CA Office

Sample Date: 05/24/21 - 05/28/21



Critical Solutions, Inc.

Proj #: PJ63338

Turnaround Time:	RUSH	24hr	48hr	Extended (<u>5</u> days)
Analysis:	<input checked="" type="checkbox"/> PLM Standard:	<input type="checkbox"/> PLM w/ Point Count: (<u> </u> 400pt. <u> </u> 1,000 pt.):		
Email results to:	FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com			

HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I./Cat II.	Condition	Sample #	Sample Location	Lab result
03	2'x4' white Acoustical Ceiling Tile w/ Fissure pattern		Y	G	Bio-A009	RM 18	9
↓	↓		↓		-A010	corridor East wall on South end	10
06	Black w/ gray streaks Floor Mat		N		-A011	RM 16	11
↓	↓		↓		-A012	RM 16	12
07	JC/WB		Y		-A013	RM 18, South East corner wall	13
↓	↓		↓		-A014	RM 26, South East corner	14
↓	↓		↓		-A015	RM 3 (Boiler Room)	15
↓	↓		↓		-A016	Jan Closet, next to RM 7	16

W = Drywall, JC = Joint Compound, WT=Wall Texture, VFT = Vinyl Floor Tile, VSF = Vinyl Sheet Flooring, BB = Baseboard, BBM = Baseboard Mastic, CM = Carpet Mastic, ACT = Acoustic Ceiling Tile, ACS = Sprayed-on Acoustic Ceiling Material, FP = Fireproofing, PI = Pipe Insulation, PFI = Pipe fitting insulation, WP = Plaster, CP = Ceiling Plaster, ES = Exterior Stucco

Relinquished by:  Date and Time: 05/31/21 06/02/21	Relinquished by: Date and Time:	Relinquished by: Date and Time:
Received by:  Date and Time: 6/2/2021 8AM	Received by: Date and Time:	Received by: Date and Time:

Sampling Data Form / Chain of custody

28/877

Client: HAY01

Site: Contra Costa College 2600 Mission Bell Drive San Pablo, CA USA

Sampled By: M.A.

FACS: San Francisco, CA Office

Sample Date: 05/24/21 - 05/28/21


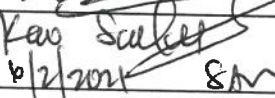
Critical Solutions, Inc.

Proj #: PJ63338

Turnaround Time:	RUSH	24hr	48hr	Extended (<u>5</u> days)
Analysis:	<input checked="" type="checkbox"/> PLM Standard:	<input type="checkbox"/> PLM w/ Point Count: (<input type="checkbox"/> 400pt. <input type="checkbox"/> 1,000 pt.):		
Email results to:	FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com			

HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I./Cat II.	Condition	Sample #	Sample Location	Lab result
08	Brown BBM		N	G	Bio-A017	RM 18, East Wall	
↓	↓		↓	↓	-A018	RM 35	17
09	1" x 1" Gray ceramic tile w/ Black specks w/ off white grout, w/ off white mortar		↓	↓	-A019	RM 24, Counter top	18
↓	↓		↓	↓	-A020	RM 18	19
10	TSI (on 4" OD pipe run)		Y	↓	-A021	RM 22, North west corner	20
↓	↓		↓	↓	-A022	RM 22	21
↓	↓		↓	↓	-A023	RM 22	22
12	2' x 4' White Acoustical ceiling tile w/ pin hole pattern		Y	↓	-A024	RM 24	23
							24

W = Drywall, JC = Joint Compound, WT = Wall Texture, VFT = Vinyl Floor Tile, VSF = Vinyl Sheet Flooring, BB = Baseboard, BBM = Baseboard Mastic, CM = Carpet Mastic, ACT = Acoustic Ceiling Tile, ACS = Sprayed-on Acoustic Ceiling Material, FP = Fireproofing, PI = Pipe Insulation, PFI = Pipe fitting insulation, WP = Plaster, CP = Ceiling Plaster, ES = Exterior Stucco

Relinquished by:  Date and Time: 05/28/21 06/02/21	Relinquished by: Date and Time:	Relinquished by: Date and Time:
Received by:  Date and Time: 6/2/2021 8AM	Received by: Date and Time:	Received by: Date and Time:

Sampling Data Form / Chain of custody

Page 4 19

28/87

Client: HAY01

Site: Contra Costa College 2600 Mission Bell Drive San Pablo, CA USA

Sampled By: M.A.

FACS: San Francisco, CA Office

Sample Date: 05/24/21 - 05/29/21

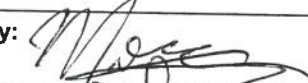
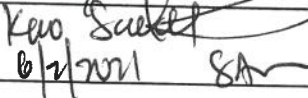
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Turnaround Time:	RUSH	24hr	48hr	Extended (<u>5</u> days)
Analysis:	<input checked="" type="checkbox"/> PLM Standard:	<input type="checkbox"/> PLM w/ Point Count: (<u> </u> 400pt. <u> </u> 1,000 pt.):		
Email results to:	FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com			

HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I./Cat II.	Condition	Sample #	Sample Location	Lab result
12	2' x 4' white Acoustical ceiling tile w/ pinhole pattern		Y	G	BIO-A025	center of RM 39	15
13	12" x 12" Ft off white w/ Gray streaks w/ yellow mastic		N		-A026	RM, 28 A on FL	26
↓	↓				-A027	RM, 28 A on FL	27
14	Red Brick and Gray mortar				-A030	RM, 26 North wall	28
↓	↓				-A031	Ext. South entrance	29
15	12" x 12" Ft tile w/ blue specks over yellow mastic				-A032	Corridor, South side	30
↓	↓				-A033	Mens restroom vestibule, NW corner	31
18	Green Carpet Mastic				-A034	RM 43, SW corner	32

W = Drywall, JC = Joint Compound, WT=Wall Texture, VFT = Vinyl Floor Tile, VSF = Vinyl Sheet Flooring, BB = Baseboard, BBM = Baseboard Mastic, CM = Carpet Mastic, ACT = Acoustic Ceiling Tile, ACS = Sprayed-on Acoustic Ceiling Material, FP = Fireproofing, PI = Pipe Insulation, PFI = Pipe fitting insulation, WP = Plaster, CP = Ceiling Plaster, ES = Exterior Stucco

Relinquished by:  Date and Time: 05/31/21	Relinquished by: Date and Time:	Relinquished by: Date and Time:
Received by:  Date and Time: 6/2/21	Received by: Date and Time:	Received by: Date and Time:

Sampling Data Form / Chain of custody

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FACS: San Francisco, CA Office
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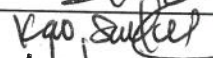
Site: Contra Costa College 2600 Mission Bell Drive San Pablo, CA USA

Sampled By: M.A.
Sample Date: 05/24/21 - 05/28/21
Proj #: PJ63338

Turnaround Time:	RUSH	24hr	48hr	Extended (<u>5</u> days)
Analysis:	<input checked="" type="checkbox"/> PLM Standard: <input type="checkbox"/> PLM w/ Point Count: (<input type="checkbox"/> 400pt. <input type="checkbox"/> 1,000 pt.):			
Email results to:	FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com			

HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I/Cat II.	Condition	Sample #	Sample Location	Lab result
18	Green Carpet Mastic		N	G	Bio-035	RM 43, SE Corner	34
16	Knock down WT (on wood panel walls)		Y		-036	Corridor, NORTH SIDE - WEST END	34
					-037	Corridor, East, NEXT TO RM37	35
					-038	Corridor, WEST NEXT TO RM18	36
					-039	Corridor, East NEXT TO RM13	37
					-040	SOUTH END, NEXT TO RM2	38
26	Dark Tan RSF with Mottle Pattern				-041	RM B-8, NW Corner	39
					V-042	RM 39 NW Corner	40

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Client: HAY01
FACS: San Francisco, CA Office
 Critical Solutions, Inc.

Site: Contra Costa College 2600 Mission Bell Drive San Pablo, CA USA

Sampled By: M.A.
Sample Date: 05/24/21 - 05/28/21
Proj #: PJ63338

Turnaround Time:	RUSH 24hr 48hr Extended (<u>5</u> days)
Analysis:	<input checked="" type="checkbox"/> PLM Standard: <input type="checkbox"/> PLM w/ Point Count: (<input type="checkbox"/> 400pt. <input type="checkbox"/> 1,000 pt.):
Email results to:	FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com

HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I./Cat II.	Condition	Sample #	Sample Location	Lab result
11	pipe Elbow (on 4" OD pipe run)		Y	G	Bio-A043	RM 41	Y1
↓	↓		↓	X	-A044	RM 17	Y2
↓	↓		↓	✓	-A045	RM 43	Y3
17	Plaster		N	✓	-A046	West wall in Wash room	Y4
↓	↓		↓	✓	-A047	NORT wall in Study room	Y5
↓	↓		↓	✓	-A048	women's RR	Y6
↓	↓		↓	✓	-A049	↓	Y7
↓	↓		↓	X	-A050	Men's RR	Y8

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Client: HAY01
FACS: San Francisco, CA Office
Critical Solutions, Inc.



Site: Contra Costa College 2600 Mission Bell Drive San Pablo, CA USA

Sampled By: M.A.
Sample Date: 05/24/21 - 09/28/21
Proj #: PJ63338

Turnaround Time:	RUSH	24hr	48hr	Extended (<u>5</u> days)
Analysis:	<input checked="" type="checkbox"/> PLM Standard:	<input type="checkbox"/> PLM w/ Point Count: (<input type="checkbox"/> 400pt. <input type="checkbox"/> 1,000 pt.):		
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HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I./Cat II.	Condition	Sample #	Sample Location	Lab result
19	4" x 4" off-white Ceramic wall tile w/ off-white grout / w off-white grout		N	G	Bio-A051	East wall of RM 43	49
↓	↓		↓	↓	-A052	East wall of RM 43	50
20	Yellow wall panel Adhesive		↓	↓	-A053	East wall of RM 43	51
↓	↓		↓	↓	-A054	West wall of RM 43	52
21	Yellow/Beige BBM		↓	↓	-A055	RM 26	53
↓	↓		↓	↓	-A056	⊕ RM 2	54
22	Fiberglass Pipe Lagging (sacket) over on 6" OD pipe run		Y	↓	-A057	RM 26	55
↓	↓		↓	↓	-A058	RM 3	56

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Site: Contra Costa College 2600 Mission Bell Drive San Pablo, CA USA

Sampled By: M.A. *28/877*
Sample Date: 09/24/21 - 09/28/21
Proj #: PJ63338

Turnaround Time:	RUSH 24hr 48hr Extended (5 days)
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Email results to:	FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com

HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I./Cat II.	Condition	Sample #	Sample Location	Lab result
22	Pipe lagging (Jacket) over fiberglass (on 6" OD pipe run)		Y	G	BIO-A059	RM 1	57
23	pipe Elbow (on 6" OD pipe run)		↓	↓	-A060	RM 1	58
↓	↓		↓	↓	-A061	RM 2 East wall South end above door	59
↓	↓		↓	↓	-A062	RM 43	60
24	Black Chalk Board		N	↓	-A063	RM 39	61
↓	↓		↓	↓	-A064	RM 2	62
25	White Insulation (on sink pipe drains)		Y	↓	-A065	RM 24	63
↓	↓		↓	↓	-A066	RM 39	64

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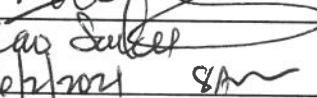
Site: Contra Costa College 2600 Mission Bell Drive San Pablo, CA USA

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HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I./Cat II.	Condition	Sample #	Sample Location	Lab result
27	TRANSIT Exhaust FIVE	VOID		G	310-A067	RM 41	X
	VOID	VOID			A068	RM 41	X
28	RED Fire stop				-A069	RM 41	65
					-A070	RM 3	66
29	Black Counter tops				-A071	RM 39	67
					-A072	RM 22	68
30	Gray Counter tops				-A073	SOUTH Wall of RM 41	69
					-A074	RM 17	70

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Client: HAY01
FACS: San Francisco, CA Office
 Critical Solutions, Inc.

Site: Contra Costa College 2600 Mission Bell Drive San Pablo, CA USA

Sampled By: M.A.
Sample Date: 05/24/21 - 05/28/21
Proj #: PJ63338

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HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I./Cat II.	Condition	Sample #	Sample Location	Lab result
31	Orange Peel WT (on drywall)		Y	G	B10-A075	East wall north end RM 2	71
					-A076	RM B8 East wall south end	72
					-A077	RM B8 East wall north end	73
					-A078	RM 6 South wall	74
					-A079	RM 12	75
32	JCLWB (on dry wall w/ orange peel WT)				-A080	RM B8 southeast corner	76
					-A081	RM 6, S. wall, East Entry	77
					-A082	RM 12	78

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HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I./Cat II.	Condition	Sample #	Sample Location	Lab result
33	Concrete (on Equipment pads)		N	G	Bio-A083	RM 3 (Boiler-RM), ^{upper} west side	79
↓	↓		↓	↓	↓	↓ south wall	
34	Pipe Gaskets		N		-A084	↓ southeast corner	80
↓	↓		↓	↓	↓	↓ central south wall	
35	12"x12" off-white wall tiles over brown mastic		Y		-A085	↓	81
↓	↓		↓	↓	↓	↓ north wall	
36	TANK Insulation		Y		-A086	RM 1	82
↓	↓		↓	↓	↓	↓ north wall	
36	TANK Insulation		Y		-A087	RM 3 (Boiler-RM),	83
↓	↓		↓	↓	↓	↓	
36	TANK Insulation		Y		-A088	RM 3 (Boiler-RM),	84
↓	↓		↓	↓	↓	↓	
36	TANK Insulation		Y		-A089	RM 3 (Boiler-RM),	85
↓	↓		↓	↓	↓	↓	
36	TANK Insulation		Y		-A090	RM 3 (Boiler-RM),	86

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Client: HAY01
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Site: Contra Costa College 2600 Mission Bell Drive San Pablo, CA USA

Sampled By: M.A.

Sample Date: 05/24/21 - 05/28/21

Proj #: PJ63338

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Email results to:	FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com

HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I./Cat II.	Condition	Sample #	Sample Location	Lab result
36	TANK Insulation		Y	G	Bio-A091	RM 3 (Boiler RM)	87
37	White HVAC vibration Dampener		↓	↓	-A092	RM 26	88
↓	↓		↓	↓	-A093	RM 37	89
38	Green HVAC vibration Dampener		↓	↓	-A094	RM 26	90
↓	↓		↓	↓	-A095	RM 37	91
39	Black mastic (on HVAC coils drip pan)		N	↓	-A096	RM 26	92
↓	↓		↓	↓	-A097	RM 37	93
58	White cloth HVAC gasket (on HVAC connection)		Y	↓	-A098	RM 13	94

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Sampling Data Form / Chain of custody

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Client: HAY01
FACS: San Francisco, CA Office
 Critical Solutions, Inc.


Site: Contra Costa College 2600 Mission Bell Drive San Pablo, CA USA

Sampled By: M.A.
Sample Date: 05/24/21 - 05/28/21
Proj #: PJ63338

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HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I./Cat II.	Condition	Sample #	Sample Location	Lab result
* 58	White cloth HVAC gasket (on HVAC connection)		Y	G	Bio-A099	RM 13	95
40	Roof curb flashing		N		Bio-A100	Roof South side	96
↓	↓		↓		-A101	West side, North End	97
41	Gray / Black Roof penetration mastic		↓		-A102	Exhaust penetration flue	98
↓	↓		↓		-A103	Exhaust penetration flue	99
42	Off-white Insulation (on pipe bracket support)		Y		-A104	South, west corner chilled water return line	100
↓	↓		↓		-A105	West side of HVAC unit	101
43	Gray HVAC seam mastic		N		-A106	Central, from old HVAC	102

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Client: HAY01
FACS: San Francisco, CA Office
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Site: Contra Costa College 2600 Mission Bell Drive San Pablo, CA USA

Sampled By: M.A.
Sample Date: 05/24/21 - 05/29/21
Proj #: PJ63338

Turnaround Time:	RUSH 24hr 48hr Extended (<u>5</u> days)
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Email results to:	FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com

HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I./Cat II.	Condition	Sample #	Sample Location	Lab result
43	Gray HVAC seam mastic		N	G	Bio-A107	Roof, S.E. Corner, from old HVAC	102
44	Gray Rolled Roof patch				-A108	S.E. Corner	104
↓	↓				-A109	North side	105
45	Gray roof mastic (on Gray rolled Roof patches)				-A110	S.E. Corner	106
↓	↓				-A111	N.E. Corner	107
46	Dark Gray sealant (on Generator exhaust DUCT Fan)				-A112	S.E. Corner	108
↓	↓				-A113		109
47	light gray HVAC seam mastic				-A114	from newer HVAC Duct DUCT	110

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Client: HAY01
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Site: Contra Costa College 2600 Mission Bell Drive San Pablo, CA USA

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HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I./Cat II.	Condition	Sample #	Sample Location	Lab result
47	Light gray HVAC seam mastic		N	G	Bio-A115	Roof from newer HVAC unit Duct	111
48	Dark Gray HVAC seam mastic				-A116	South west corner of HVAC unit	112
↓	↓				-A117	North west corner of HVAC unit	113
49	Berge Sealant (on Exhaust Fan seam)				-A118	Northwest from old HVAC vent	114
↓	↓				-A119	Northwest from old HVAC vent	115
50	Silver Aluminum w/ black Adhesive Duct lining				-A120		116
↓	↓				-A121		117
51	Black Black paint and penetration mastic			X	-A122	VOID	X

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Client: HAY01
FACS: San Francisco, CA Office
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Site: Contra Costa College 2600 Mission Bell Drive San Pablo, CA USA

Sampled By: M.A. 281877
Sample Date: 05-24-21 - 05/28/21
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Turnaround Time:	RUSH	24hr	48hr	Extended (<u>5</u> days)
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HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I./Cat II.	Condition	Sample #	Sample Location	Lab result
51	Black seam and penetration mastic VOID		N	G X	Bio-A123	Roof VOID	X
52	Black Coating (on roof access ladder)				-A124	RM 3 (Boiler RM) NORTHEAST Corner	118
↓	↓				-A125	↓ NORTHEAST Corner	119
53	Stucco				-A126	Ext. South, North, @ Entry, Soffit ceiling	120
↓	↓				-A127	↓ South, @ Entry, Soffit	121
↓	↓				-A128	Ext. North, South, @ Entry soffit	122
54	Concrete (slab)				-A129	RM 22	123
54	↓				-A130	RM 3 (Boiler-RM)	124

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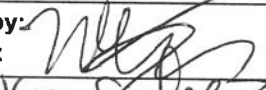
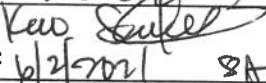
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Analysis:	<input checked="" type="checkbox"/> PLM Standard: <input type="checkbox"/> PLM w/ Point Count: (<input type="checkbox"/> 400pt. <input type="checkbox"/> 1,000 pt.):
Email results to:	FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com

HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I./Cat II.	Condition	Sample #	Sample Location	Lab result
54	Concrete (slab)		N	G	Bio-A131	Ext. West side, South END	125
55	White Caulk "putty like"				-A132	Ext. South side of Entry, between brick & metal window frame.	126
↓	↓				-A133	Ext. North side of Entry, between brick & metal window frame	127
56	Light Gray Caulk				-A134	Ext. East side, North South End, between glass & window frame	128
↓	↓				-A135	↓, West side, North END, between glass & window frame	129
57	Duct wrap over fiberglass		Y		-A136	RM 26	130
↓	↓				-A137	RM 37	131
↓	↓				-A138	RM 13	132

JW = Drywall, JC = Joint Compound, WT=Wall Texture, VFT = Vinyl Floor Tile, VSF = Vinyl Sheet Flooring, BB = Baseboard, BBM = Baseboard Mastic, CM = Carpet Mastic, ACT = Acoustic Ceiling Tile, ACS = Sprayed-on Acoustic Ceiling Material, FP = Fireproofing, PI = Pipe Insulation, PFI = Pipe fitting insulation, WP = Plaster, CP = Ceiling Plaster, ES = Exterior Stucco

Relinquished by:  Date and Time: 05/31/21 @ 06/02/21	Relinquished by: Date and Time:	Relinquished by: Date and Time:
Received by:  Date and Time: 6/2/21 SA	Received by: Date and Time:	Received by: Date and Time:

Sampling Data Form / Chain of custody

281877

Client: HAY01

Site: Contra Costa College 2600 Mission Bell Drive San Pablo, CA USA

Sampled By: M.A.

FACS: San Francisco, CA Office

Sample Date: 05-24-21 - 05-28-21

Critical Solutions, Inc.

Proj #: PJ63338

Turnaround Time:	RUSH	24hr	48hr	Extended (<u>5</u> days)
Analysis:	<input checked="" type="checkbox"/> PLM Standard:	<input type="checkbox"/> PLM w/ Point Count: (<u>400pt.</u> <u>1,000 pt.</u>):		
Email results to:	FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com			

HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I./Cat II.	Condition	Sample #	Sample Location	Lab result
59	TAR & gravel Roof field		N	G	B10-A139	Roof, S.E. corner	133
↓	↓		↓	↓	-A140	Central	134
↓	↓		↓	↓	-A141	North side	135
60	Pipe Lagging (jacket) over fiberglass (on 4" OD pipe run)		Y		-A142	RM 41	136
↓	↓		↓	↓	V-A143	RM 17	137
↓	↓		↓	↓	V-A144	RM 43	138
61	1" x 2" Gray Ceramic Floor Tile w/ gray grout and off-white Mortar		N	G	-A145	Men's RR	139
↓	↓		↓	↓	-A146	↓	140

YW = Drywall, JC = Joint Compound, WT=Wall Texture, VFT = Vinyl Floor Tile, VSF = Vinyl Sheet Flooring, BB = Baseboard, BBM = Baseboard Mastic, CM = Carpet Mastic, ACT = Acoustic Ceiling Tile, ACS = Sprayed-on Acoustic Ceiling Material, FP = Fireproofing, PI = Pipe Insulation, PFI = Pipe fitting insulation, WP = Plaster, CP = Ceiling Plaster, ES = Exterior Stucco

Relinquished by: Date and Time: <u>[Signature]</u> <u>05/31/21</u> <u>06/02/21</u>	Relinquished by: Date and Time:	Relinquished by: Date and Time:
Received by: <u>Kap Suter</u> Date and Time: <u>6/2/2021</u> <u>[Signature]</u>	Received by: Date and Time:	Received by: Date and Time:

Sampling Data Form / Chain of custody

Page 19 of 19

28/877

Client: HAY01
FACS: San Francisco, CA Office
 Critical Solutions, Inc.

Site: Contra Costa College 2600 Mission Bell Drive San Pablo, CA USA

Sampled By: M.A.
Sample Date: 05/24/21 - 05/28/21
Proj #: PJ63338

Turnaround Time: RUSH 24hr 48hr Extended (5 days)

Analysis: PLM Standard: _____ PLM w/ Point Count: (_____ 400pt. _____ 1,000 pt.):

Email results to: FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com

HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I./Cat II.	Condition	Sample #	Sample Location	Lab result
62	off-white HVAC SEAM TAPE		✓	G	B10-A147	East RM 39	141
	↓		↓	↓	-A148	Rm 21	142
63	Black Moisture Barrier		N	↓	-A149	Ext. East side, South End, behind upper wall wood panel	143
	↓		↓	↓	-A150	Ext. ↓	144

JW = Drywall, JC = Joint Compound, WT=Wall Texture, VFT = Vinyl Floor Tile, VSF = Vinyl Sheet Flooring, BB = Baseboard, BBM = Baseboard Mastic, CM = Carpet Mastic, ACT = Acoustic Ceiling Tile, ACS = Sprayed-on Acoustic Ceiling Material, FP = Fireproofing, PI = Pipe Insulation, PFI = Pipe fitting insulation, WP = Plaster, CP = Ceiling Plaster, ES = Exterior Stucco

Relinquished by: Date and Time: 05/31/21 12:02/21	Relinquished by: Date and Time:	Relinquished by: Date and Time:
Received by: KAO Suter Date and Time: 6/2/21 8A	Received by: Date and Time:	Received by: Date and Time:



Bulk Asbestos Analysis

(EPA Method 40CFR, Part 763, Appendix E to Subpart E and EPA 600/R-93-116, Visual Area Estimation)
NVLAP Lab Code: 101459-0

Forensic Analytical Consulting Svcs
Gary Lowe
21228 Cabot Blvd.

Hayward, CA 94545

Client ID: HAY01
Report Number: B319974
Date Received: 07/02/21
Date Analyzed: 07/06/21
Date Printed: 07/07/21
First Reported: 07/07/21

Job ID/Site: PJ63338; Critical Solutions, Inc. Contra Costa College 2600 Mission Bell Drive
San Pablo CA
Date(s) Collected: 07/02/2021

SGSFL Job ID: HAY01
Total Samples Submitted: 5
Total Samples Analyzed: 5

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
BIO-A151 Layer: Grey Cementitious Material	12443231		ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
BIO-A131A Layer: Grey Cementitious Material	12443232		ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
BIO-A131B Layer: Grey Cementitious Material	12443233		ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
BIO-A152 Layer: Grey Cementitious Material	12443234		ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
BIO-A153 Layer: Grey Cementitious Material	12443235		ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							

Tad Thrower, Laboratory Supervisor, Hayward Laboratory

Note: Limit of Quantification ('LOQ') = 1%. 'Trace' denotes the presence of asbestos below the LOQ. 'ND' = 'None Detected'.

Analytical results and reports are generated by SGS Forensic Laboratories (SGSFL) at the request of and for the exclusive use of the person or entity (client) named on such report. Results, reports or copies of same will not be released by SGSFL to any third party without prior written request from client. This report applies only to the sample(s) tested. Supporting laboratory documentation is available upon request. This report must not be reproduced except in full, unless approved by SGSFL. The client is solely responsible for the use and interpretation of test results and reports requested from SGSFL. SGSFL is not able to assess the degree of hazard resulting from materials analyzed. SGS Forensic Laboratories reserves the right to dispose of all samples after a period of thirty (30) days, according to all state and federal guidelines, unless otherwise specified. All samples were received in acceptable condition unless otherwise noted.

Sampling Data Form / Chain of custody

Client: HAY01
FACS: San Francisco, CA Office
 Critical Solutions, Inc.

Site: Contra Costa College 2600 Mission Bell Drive San Pablo, CA USA

Sampled By: Martin Alvarez
Sample Date: 07/02/21
Proj #: PJ63338

Turnaround Time: RUSH 24hr 48hr Extended (3 days)

Analysis: PLM Standard: PLM w/ Point Count: (400pt. 1,000 pt.):

Email results to: FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com and malvarez@forensicanalytical.com

HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I./Cat II.	Condition	Sample #	Sample Location	Lab result
54	Concrete slab		N	G	Bio-A151	Rm 43	
54 64	Concrete slab		↓	↓	Bio-A131A	Ext. West side, South END, Approx 1'.6" away from where A131 was collected.	
↓	↓	Bio-A131B			Ext. East side, North END		
65	Concrete (Foundation wall)				Bio-A152	Ext. West side, North END	
↓	↓	Bio-A153			Ext. South side, Foundation wall, near Bldg Entry		

DW = Drywall, JC = Joint Compound, WT=Wall Texture, VFT = Vinyl Floor Tile, VSF = Vinyl Sheet Flooring, BB = Baseboard, RBM = Baseboard Mastic, CM = Carpet Mastic, ACT = Acoustic Ceiling Tile, ACS = Sprayed-on Acoustic Ceiling Material, FP = Fireproofing, PI = Pipe Insulation, PFI = Pipe fitting insulation, WP = Plaster, CP = Ceiling Plaster, ES = Exterior Stucco

Relinquished by: [Signature]
Date and Time: 07/02/21

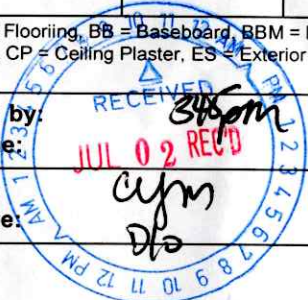
Relinquished by: [Signature]
Date and Time: [Signature]

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Date and Time:

Received by: [Signature]
Date and Time:

Received by: [Signature]
Date and Time:

Received by:
Date and Time:





Bulk Asbestos Analysis

(EPA Method 40CFR, Part 763, Appendix E to Subpart E and EPA 600/R-93-116, Visual Area Estimation)
NVLAP Lab Code: 101459-0

Forensic Analytical Consulting Svcs
Gary Lowe
21228 Cabot Blvd.

Hayward, CA 94545

Client ID: HAY01
Report Number: B318732
Date Received: 06/03/21
Date Analyzed: 06/08/21
Date Printed: 06/09/21
First Reported: 06/09/21

Job ID/Site: PJ63338; Critical Solutions, Inc.

SGSFL Job ID: HAY01
Total Samples Submitted: 31
Total Samples Analyzed: 23

Date(s) Collected: 06/03/2021

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
BR-01-A Layer: Grey Mortar	12430484		ND				
Total Composite Values of Fibrous Components: Cellulose (Trace)		Asbestos (ND)					
BR-02-A Layer: Grey Mortar Layer: Red Cementitious Material	12430485		ND ND				
Total Composite Values of Fibrous Components: Cellulose (Trace)		Asbestos (ND)					
BR-03-A Layer: Grey Cementitious Material	12430486	Chrysotile	Trace				
Total Composite Values of Fibrous Components: Cellulose (Trace)		Asbestos (Trace)					
BR-04-A Comment: Sample not analyzed due to prior positive result in series.	12430487						
BR-05-A Layer: Grey Cementitious Material	12430488		ND				
Total Composite Values of Fibrous Components: Cellulose (Trace)		Asbestos (ND)					
BR-06-A Layer: Grey Cementitious Material Layer: Paint	12430489		ND ND				
Total Composite Values of Fibrous Components: Cellulose (Trace)		Asbestos (ND)					
BR-07-A Layer: Grey Non-Fibrous Material	12430490		ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
BR-08-A Layer: Grey Non-Fibrous Material	12430491		ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					

Client Name: Forensic Analytical Consulting Svcs

Report Number: B318732

Date Printed: 06/09/21

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
BR-09-A	12430492						
Layer: Beige Non-Fibrous Material		Chrysotile	Trace				
Total Composite Values of Fibrous Components:		Asbestos (Trace)					
BR-10-A	12430493						
Comment: Sample not analyzed due to prior positive result in series.							
BR-11-A	12430494						
Layer: Grey Non-Fibrous Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (2 %)							
BR-12-A	12430495						
Layer: Grey Non-Fibrous Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (2 %)							
BR-13-A	12430496						
Layer: Black Non-Fibrous Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
BR-14-A	12430497						
Layer: Green Semi-Fibrous Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (10 %)							
BR-15-A	12430498						
Layer: White Semi-Fibrous Material		Chrysotile	3 %	Amosite	15 %		
Total Composite Values of Fibrous Components:		Asbestos (18%)					
Cellulose (Trace)							
BR-16-A	12430499						
Comment: Sample not analyzed due to prior positive result in series.							
BR-17-A	12430500						
Comment: Sample not analyzed due to prior positive result in series.							
BR-18-A	12430501						
Layer: White Semi-Fibrous Material		Chrysotile	3 %	Amosite	10 %		
Total Composite Values of Fibrous Components:		Asbestos (13%)					
Cellulose (Trace)							
BR-19-A	12430502						
Comment: Sample not analyzed due to prior positive result in series.							
BR-20-A	12430503						
Layer: White Plaster			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							

Client Name: Forensic Analytical Consulting Svcs

Report Number: B318732

Date Printed: 06/09/21

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
BR-21-A	12430504						
Layer: White Plaster			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
BR-22-A	12430505						
Layer: White Plaster			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
BR-23-A	12430506						
Layer: White Plaster			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
BR-24-A	12430507						
Layer: White Plaster			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
BR-25-A	12430508						
Layer: Yellow Fibrous Tile			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (2 %) Fibrous Glass (90 %)							
BR-26-A	12430509						
Layer: Yellow Fibrous Material			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace) Fibrous Glass (99 %)							
BR-27-A	12430510						
Layer: Yellow Fibrous Material			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace) Fibrous Glass (99 %)							
BR-28-A	12430511						
Layer: White Semi-Fibrous Material		Chrysotile	3 %	Amosite	10 %		
Total Composite Values of Fibrous Components:		Asbestos (13%)					
Cellulose (Trace)							
BR-29-A	12430512						
Comment: Sample not analyzed due to prior positive result in series.							
BR-30-A	12430513						
Comment: Sample not analyzed due to prior positive result in series.							

Client Name: Forensic Analytical Consulting Svcs

Report Number: B318732

Date Printed: 06/09/21

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
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BR-31-A 12430514

Comment: Sample not analyzed due to prior positive result in series.



Tad Thrower, Laboratory Supervisor, Hayward Laboratory

Note: Limit of Quantification ('LOQ') = 1%. 'Trace' denotes the presence of asbestos below the LOQ. 'ND' = 'None Detected'.

Analytical results and reports are generated by SGS Forensic Laboratories (SGSFL) at the request of and for the exclusive use of the person or entity (client) named on such report. Results, reports or copies of same will not be released by SGSFL to any third party without prior written request from client. This report applies only to the sample(s) tested. Supporting laboratory documentation is available upon request. This report must not be reproduced except in full, unless approved by SGSFL. The client is solely responsible for the use and interpretation of test results and reports requested from SGSFL. SGSFL is not able to assess the degree of hazard resulting from materials analyzed. SGS Forensic Laboratories reserves the right to dispose of all samples after a period of thirty (30) days, according to all state and federal guidelines, unless otherwise specified. All samples were received in acceptable condition unless otherwise noted.

Sampling Data Form / Chain of custody

Client: HAY01
FACS: San Francisco, CA Office
 Critical Solutions, Inc.

Site: Contra Costa College 2600 Mission Bell Drive San Pablo, CA USA

Sampled By: Sevilla / Radzinski

Sample Date: 03 June 2021

Proj #: PJ63338

Turnaround Time:	RUSH	24hr	48hr	Extended (<u>5</u> days)
Analysis:	<input checked="" type="checkbox"/> PLM Standard:	<input type="checkbox"/> PLM w/ Point Count: (<u> </u> 400pt. <u> </u> 1,000 pt.):		
Email results to:	FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com			

prior positive per P. Radzinski - Cym

HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I./Cat II.	Condition	Sample #	Sample Location	Lab result
01	mortar				BR-01-A	Ext. wall, NW corner	
01	mortar				BR-02-A	Ext. wall, N. side	
03	concrete				BR-03-A	pad, @ W. entry threshold	
03	Concrete				BR-04-A	pad, NW quadrant	
04	concrete				BR-05-A	wall footer, @ W. entry	
04	concrete				BR-06-A	wall footer, S. wall, center	
02	sealant				BR-07-A	S. wall, ext. penetration	
02	sealant				BR-08-A	S. wall, ext. penetration	

DW = Drywall, JC = Joint Compound, WT=Wall Texture, VFT = Vinyl Floor Tile, VSF = Vinyl Sheet Flooring, BB = Baseboard, BBM = Baseboard Mastic, CM = Carpet Mastic, ACT = Acoustic Ceiling Tile, ACS = Sprayed-on Acoustic Ceiling Material, FP = Fireproofing, PI = Pipe Insulation, PFI = Pipe fitting insulation, WP = Plaster, CP = Ceiling Plaster, ES = Exterior Stucco

Relinquished by: Radzinski Date and Time: 03 June 2021 / 13:10	Relinquished by: Date and Time:	Relinquished by: Date and Time:
Received by: Date and Time:	Received by: Date and Time:	Received by: Date and Time:



Sampling Data Form / Chain of custody

Client: HAY01
FACS: San Francisco, CA Office
 Critical Solutions, Inc.

Site: Contra Costa College 2600 Mission Bell Drive San Pablo, CA USA

Sampled By: Sevilla/Rodzinski
Sample Date: 03 June 2021
Proj #: PJ63338

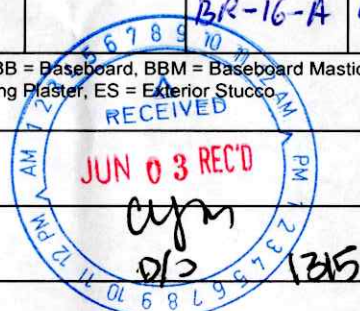
Turnaround Time:	RUSH 24hr 48hr Extended (<u>5</u> days)
Analysis:	<input checked="" type="checkbox"/> PLM Standard: <input type="checkbox"/> PLM w/ Point Count: (<input type="checkbox"/> 400pt. <input type="checkbox"/> 1,000 pt.):
Email results to:	FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com

HM

HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I./Cat II.	Condition	Sample #	Sample Location	Lab result
10	sealant,				BR-09-A	E. side, ext., Louvre, S. of center	
10	sealant,				BR-10-A	E. side, ext., Louvre, center	
05	glazing,				BR-11-A	E. side, ext., window, S. of center	
05	glazing,				BR-12-A	E. side, ext., @ E door	
08	gasket				BR-13-A	Ext., N. side, flange, Westerly	
08	gasket				BR-14-A	Ext., N. side, flang, W. of center	
06	TSI				BR-15-A	10" line, straight run, N. pipe W. of center	
06	TSI				BR-16-A	10" line, straight run, N. pipe ~ center	

DW = Drywall, JC = Joint Compound, WT=Wall Texture, VFT = Vinyl Floor Tile, VSF = Vinyl Sheet Flooring, BB = Baseboard, BBM = Baseboard Mastic, CM = Carpet Mastic, ACT = Acoustic Ceiling Tile, ACS = Sprayed-on Acoustic Ceiling Material, FP = Fireproofing, PI = Pipe Insulation, PFI = Pipe fitting insulation, WP = Plaster, CP = Ceiling Plaster, ES = Exterior Stucco

Relinquished by: Rodzinski Date and Time: 03 June 2021 / 03:10	Relinquished by: Date and Time:	Relinquished by: Date and Time:
Received by: Date and Time:	Received by: Date and Time:	Received by: Date and Time:



Sampling Data Form / Chain of custody

Client: HAY01
FACS: San Francisco, CA Office
 Critical Solutions, Inc.

Site: Contra Costa College 2600 Mission Bell Drive San Pablo, CA USA

Sampled By: Sewille/Radzinski
Sample Date: 03 June 2021
Proj #: PJ63338

Turnaround Time:	RUSH 24hr 48hr Extended (<u>5</u> days)
Analysis:	<input checked="" type="checkbox"/> PLM Standard: <input type="checkbox"/> PLM w/ Point Count: (<input type="checkbox"/> 400pt. <input type="checkbox"/> 1,000 pt.):
Email results to:	FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com

HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I./Cat II.	Condition	Sample #	Sample Location	Lab result
06	TSI				BR-17-A	10" straight run, S. side, elevated, W. of center	
07	TSI				BR-18-A	10" elbow, elevated, S. side, W. of center	
07	TSI				BR-19-A	10" elbow, NW quadrant	
09	PLASTER WALL				BR-20-A	BOILER ROOM / W. WALL	
09	PLASTER WALL				BR-21-A	BOILER ROOM / SE CORNER / WALL	
09	PLASTER WALL				BR-22-A	BOILER ROOM / NE CORNER / WALL	
09	PLASTER WALL				BR-23-A	BOILER ROOM / NW CORNER / WALL	
09	PLASTER WALL				BR-24-A	BOILER ROOM / SW CORNER / WALL	

DW = Drywall, JC = Joint Compound, WT=Wall Texture, VFT = Vinyl Floor Tile, VSF = Vinyl Sheet Flooring, BB = Baseboard, BBM = Baseboard Mastic, CM = Carpet Mastic, ACT = Acoustic Ceiling Tile, ACS = Sprayed-on Acoustic Ceiling Material, FP = Fireproofing, PI = Pipe Insulation, PFI = Pipe fitting insulation, WP = Plaster, CP = Ceiling Plaster, ES = Exterior Stucco

Relinquished by: Radzinski Date and Time: 03 June 2021 / 1310	Relinquished by: Date and Time:	Relinquished by: Date and Time:
Received by: Date and Time:	Received by: Date and Time:	Received by: Date and Time:



Sampling Data Form / Chain of custody

Client: HAY01
FACS: San Francisco, CA Office
 Critical Solutions, Inc.

Site: Contra Costa College 2600 Mission Bell Drive San Pablo, CA USA

Sampled By: Sevilla/Radzinski
Sample Date: 03 June 2021
Proj #: PJ63338

Turnaround Time:	RUSH 24hr 48hr Extended (<u>5</u> days)
Analysis:	<input checked="" type="checkbox"/> PLM Standard: _____ PLM w/ Point Count: (_____ 400pt. _____ 1,000 pt.):
Email results to:	FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com

HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I./Cat II.	Condition	Sample #	Sample Location	Lab result
14	TS1				BR-25-A	straight run, elevated, 5 side near center	
14	TS1				BR-26-A	straight run, elevated, 5 side east of center	
14	TS1				BR-27-A	straight run, elevated, 5-side	
12	TS1				BR-28-A	straight run, 6" verticle	
12	TS1				BR-29-A	straight run, 6" verticle	
12	TS1				BR-30-A	straight run, 6" verticle	
13	TS1				BR-31-A	elbow, 6"	

DW = Drywall, JC = Joint Compound, WT=Wall Texture, VFT = Vinyl Floor Tile, VSF = Vinyl Sheet Flooring, BB = Baseboard, BBM = Baseboard Mastic, CM = Carpet Mastic, ACT = Acoustic Ceiling Tile, ACS = Sprayed-on Acoustic Ceiling Material, FP = Fireproofing, PI = Pipe Insulation, PFI = Pipe fitting insulation, WP = Plaster, CP = Ceiling Plaster, ES = Exterior Stucco

Relinquished by: Radzinski Date and Time: 03 June 2021 / 1310	Relinquished by: Date and Time:	Relinquished by: Date and Time:
Received by: Date and Time:	Received by: Date and Time:	Received by: Date and Time:





Bulk Asbestos Analysis

(EPA Method 40CFR, Part 763, Appendix E to Subpart E and EPA 600/R-93-116, Visual Area Estimation)
NVLAP Lab Code: 101459-0

Forensic Analytical Consulting Svcs
Gary Lowe
21228 Cabot Blvd.

Hayward, CA 94545

Client ID: HAY01
Report Number: B319975
Date Received: 07/02/21
Date Analyzed: 07/06/21
Date Printed: 07/07/21
First Reported: 07/07/21

Job ID/Site: PJ63338; Critical Solutions, Inc. Contra Costa College 2600 Mission Bell Drive
San Pablo CA
Date(s) Collected: 07/02/2021

SGSFL Job ID: HAY01
Total Samples Submitted: 5
Total Samples Analyzed: 5

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
BR-RF-A01	12443240						
Layer: Black Mastic			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (15 %)							
BR-RF-A02	12443241						
Layer: Black Mastic			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (15 %)							
BR-RF-A03	12443242						
Layer: Stones			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace) Fibrous Glass (45 %)							
Comment: Bulk complex sample.							
BR-RF-A04	12443243						
Layer: Stones			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace) Fibrous Glass (45 %)							
Comment: Bulk complex sample.							

Client Name: Forensic Analytical Consulting Svcs

Report Number: B319975

Date Printed: 07/07/21

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
BR-RF-A05	12443244						
Layer: Stones			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)	Fibrous Glass (45 %)						
Comment: Bulk complex sample.							



Tad Thrower, Laboratory Supervisor, Hayward Laboratory

Note: Limit of Quantification ('LOQ') = 1%. 'Trace' denotes the presence of asbestos below the LOQ. 'ND' = 'None Detected'.

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Sampling Data Form / Chain of custody

Client: HAY01
FACS: San Francisco, CA Office
 Critical Solutions, Inc.

Site: Contra Costa College 2600 Mission Bell Drive San Pablo, CA USA

Sampled By: J. SEVILLA

Sample Date: 07/02/21

Proj #: PJ63338

Turnaround Time:	RUSH 24hr 48hr Extended (<u>3</u> days)
Analysis:	<input checked="" type="checkbox"/> PLM Standard: <input type="checkbox"/> PLM w/ Point Count: (400pt. 1,000 pt.):
Email results to:	FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com

HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I./Cat II.	Condition	Sample #	Sample Location	Lab result
01	BLACK PENETRATION ROOF MASTIC	100 LF		G	BR-RF-A01	BOILER ROOM / ROOF / W. AREA	
↓	↓	↓		↓	BR-RF-A02	↓ / E. AREA	
02	ROOF FIELD	3060 SF 250		G	BR-RF-A03	BOILER ROOM / ROOF / W. AREA	
↓	↓	↓		↓	BR-RF-A04	↓ / CENTER	
↓	↓	↓		↓	BR-RF-A05	↓ / E. AREA	

DW = Drywall, JC = Joint Compound, WT=Wall Texture, VFT = Vinyl Floor Tile, VSF = Vinyl Sheet Flooring, BB = Baseboard, BBM = Baseboard Mastic, CM = Carpet Mastic, ACT = Acoustic Ceiling Tile, ACS = Sprayed-on Acoustic Ceiling Material, FP = Fireproofing, PI = Pipe Insulation, PFI = Pipe fitting insulation, WP = Plaster, CP = Ceiling Plaster, ES = Exterior Stucco

Relinquished by: Date and Time:	<i>[Signature]</i> 07/02/21	Relinquished by: Date and Time:	Relinquished by: Date and Time:
Received by: Date and Time:	Received by: Date and Time:	Received by: Date and Time:	Received by: Date and Time:





Bulk Asbestos Analysis

(EPA Method 40CFR, Part 763, Appendix E to Subpart E and EPA 600/R-93-116, Visual Area Estimation)
NVLAP Lab Code: 101459-0

Forensic Analytical Consulting Svcs
Gary Lowe
21228 Cabot Blvd.

Hayward, CA 94545

Client ID: HAY01
Report Number: B318755
Date Received: 06/03/21
Date Analyzed: 06/08/21
Date Printed: 06/09/21
First Reported: 06/09/21

Job ID/Site: PJ63338; Critical Solutions, Inc.

SGSFL Job ID: HAY01
Total Samples Submitted: 114
Total Samples Analyzed: 94

Date(s) Collected: 05/26/2021

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
PSBN-001	12430792						
Layer: White Tile			ND				
Layer: Brown/Green Mastic			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBN-002	12430793						
Layer: White Tile			ND				
Layer: Brown/Green Mastic			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBN-003	12430794						
Layer: Grey Sheet Flooring			ND				
Layer: Tan Mastic			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBN-004	12430795						
Layer: Grey Sheet Flooring			ND				
Layer: Tan Mastic			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBN-005	12430796						
Layer: Brown/Green Mastic			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBN-006	12430797						
Layer: Brown/Green Mastic			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBN-007	12430798						
Layer: Brown Mastic			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							

Client Name: Forensic Analytical Consulting Svcs

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Date Printed: 06/09/21

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
PSBN-008	12430799						
Layer: Brown Mastic			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBN-009	12430800						
Layer: Brown/Tan Mastic			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBN-010	12430801						
Layer: Brown/Tan Mastic			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBN-011	12430802						
Layer: Brown Tile			ND				
Layer: Black Mastic		Chrysotile	5 %				
Total Composite Values of Fibrous Components:		Asbestos (Trace)					
Cellulose (Trace)							
PSBN-012	12430803						
Comment: Sample not analyzed due to prior positive result in series.							
PSBN-013	12430804						
Layer: Blue Tile			ND				
Layer: Black Mastic		Chrysotile	5 %				
Total Composite Values of Fibrous Components:		Asbestos (Trace)					
Cellulose (Trace)							
PSBN-014	12430805						
Comment: Sample not analyzed due to prior positive result in series.							
PSBN-015	12430806						
Layer: Beige Tile			ND				
Layer: Black Mastic		Chrysotile	5 %				
Total Composite Values of Fibrous Components:		Asbestos (Trace)					
Cellulose (Trace)							
PSBN-016	12430807						
Comment: Sample not analyzed due to prior positive result in series.							
PSBN-017	12430808						
Layer: Red Tile			ND				
Layer: Black Mastic		Chrysotile	5 %				
Total Composite Values of Fibrous Components:		Asbestos (Trace)					
Cellulose (Trace)							
PSBN-018	12430809						
Comment: Sample not analyzed due to prior positive result in series.							

Client Name: Forensic Analytical Consulting Svcs

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Date Printed: 06/09/21

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
PSBN-019	12430810						
Layer: Grey Tile			ND				
Layer: Black Mastic		Chrysotile	5 %				
Total Composite Values of Fibrous Components:		Asbestos (Trace)					
Cellulose (Trace)							
PSBN-020	12430811						
Comment: Sample not analyzed due to prior positive result in series.							
PSBN-021	12430812						
Layer: Grey Ceramic Tile			ND				
Layer: Grey Grout			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBN-022	12430813						
Layer: Grey Ceramic Tile			ND				
Layer: Grey Grout			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBN-023	12430814						
Layer: Beige Mastic			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBN-024	12430815						
Layer: Beige Mastic			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBN-025	12430816						
Layer: White Semi-Fibrous Material			ND				
Layer: Off-White Adhesive			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (50 %)							
PSBN-026	12430817						
Layer: White Semi-Fibrous Material			ND				
Layer: Off-White Adhesive			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (50 %)							
PSBN-027	12430818						
Layer: White Drywall			ND				
Layer: Off-White Joint Compound		Chrysotile	2 %				
Layer: White Tape			ND				
Layer: Off-White Joint Compound		Chrysotile	2 %				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (Trace)					
Cellulose (20 %) Fibrous Glass (10 %)							

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Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
PSBN-028	12430819						
Comment: Sample not analyzed due to prior positive result in series.							
PSBN-029	12430820						
Comment: Sample not analyzed due to prior positive result in series.							
PSBN-030	12430821						
Comment: Sample not analyzed due to prior positive result in series.							
PSBN-031	12430822						
Comment: Sample not analyzed due to prior positive result in series.							
PSBN-032	12430823						
Layer: White Texture					ND		
Layer: Paint					ND		
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBN-033	12430824						
Layer: Off-White Texture		Chrysotile	2 %				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (2%)					
Cellulose (Trace)							
PSBN-034	12430825						
Comment: Sample not analyzed due to prior positive result in series.							
PSBN-035	12430826						
Comment: Sample not analyzed due to prior positive result in series.							
PSBN-036	12430827						
Comment: Sample not analyzed due to prior positive result in series.							
PSBN-037	12430828						
Layer: Off-White Texture		Chrysotile	2 %				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (2%)					
Cellulose (Trace)							
PSBN-038	12430829						
Comment: Sample not analyzed due to prior positive result in series.							
PSBN-039	12430830						
Comment: Sample not analyzed due to prior positive result in series.							
PSBN-040	12430831						
Comment: Sample not analyzed due to prior positive result in series.							
PSBN-041	12430832						
Comment: Sample not analyzed due to prior positive result in series.							
PSBN-042	12430833						
Layer: Red Cementitious Material					ND		
Layer: Grey Mortar					ND		
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							

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Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
PSBN-043	12430834						
Layer: Red Cementitious Material			ND				
Layer: Grey Mortar			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBN-044	12430835						
Layer: Beige Fibrous Material			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (35 %) Fibrous Glass (45 %)							
PSBN-045	12430836						
Layer: Beige Fibrous Material			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (35 %) Fibrous Glass (45 %)							
PSBN-046	12430837						
Layer: Brown Mastic			ND				
Layer: Beige Fibrous Material			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (35 %) Fibrous Glass (45 %)							
PSBN-047	12430838						
Layer: Brown Mastic			ND				
Layer: Beige Fibrous Material			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (35 %) Fibrous Glass (45 %)							
PSBN-048	12430839						
Layer: Grey Non-Fibrous Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBN-049	12430840						
Layer: Grey Non-Fibrous Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBN-050	12430841						
Layer: White Coating		Chrysotile	2 %				
Total Composite Values of Fibrous Components:		Asbestos (2%)					
Cellulose (Trace)							
PSBN-051	12430842						
Comment: Sample not analyzed due to prior positive result in series.							

Client Name: Forensic Analytical Consulting Svcs

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Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
PSBN-052	12430843						
Layer: Black Coating			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBN-053	12430844						
Layer: Black Coating			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBN-054	12430845						
Layer: Red Cementitious Material			ND				
Layer: Grey Mortar			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBN-055	12430846						
Layer: Red Cementitious Material			ND				
Layer: Grey Mortar			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBN-056	12430847						
Layer: Black Semi-Fibrous Material		Chrysotile	10 %				
Total Composite Values of Fibrous Components:		Asbestos (10%)					
Cellulose (Trace)							
PSBN-057	12430848						
Comment: Sample not analyzed due to prior positive result in series.							
PSBN-058	12430849						
Layer: Black Non-Fibrous Material		Chrysotile	2 %				
Total Composite Values of Fibrous Components:		Asbestos (2%)					
Cellulose (Trace)							
PSBN-059	12430850						
Comment: Sample not analyzed due to prior positive result in series.							
PSBN-060	12430851						
Layer: Red Semi-Fibrous Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace) Synthetic (10 %)							
PSBN-061	12430852						
Layer: Red Semi-Fibrous Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace) Synthetic (10 %)							
PSBN-062	12430853						
Layer: Black Tape			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (95 %)							

Client Name: Forensic Analytical Consulting Svcs

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Date Printed: 06/09/21

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
PSBN-063	12430854						
Layer: Black Tape							ND
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (95 %)							
PSBN-064	12430855						
Layer: Grey Semi-Fibrous Material							ND
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace) Synthetic (25 %)							
PSBN-065	12430856						
Layer: Grey Semi-Fibrous Material							ND
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace) Synthetic (25 %)							
PSBN-066	12430857						
Layer: Tan Fibrous Material							ND
Layer: Silver Foil							ND
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (95 %)							
PSBN-067	12430858						
Layer: Tan Fibrous Material							ND
Layer: Silver Foil							ND
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (95 %)							
PSBN-068	12430859						
Layer: Tan Fibrous Material							ND
Layer: Silver Foil							ND
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (95 %)							
PSBN-069	12430860						
Layer: Black Fibrous Material							ND
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace) Fibrous Glass (99 %)							
PSBN-070	12430861						
Layer: Black Fibrous Material							ND
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace) Fibrous Glass (99 %)							
PSBN-071	12430862						
Layer: Yellow Fibrous Material							ND
Layer: Tan Fibrous Material							ND
Layer: Silver Foil							ND
Layer: Yellow Mastic							ND
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (5 %) Fibrous Glass (80 %)							

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Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
PSBN-072	12430863						
Layer: Yellow Fibrous Material			ND				
Layer: Tan Fibrous Material			ND				
Layer: Silver Foil			ND				
Layer: Yellow Mastic			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (5 %)	Fibrous Glass (80 %)						
PSBN-073	12430864						
Layer: Yellow Fibrous Material			ND				
Layer: Tan Fibrous Material			ND				
Layer: Silver Foil			ND				
Layer: Yellow Mastic			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (5 %)	Fibrous Glass (80 %)						
PSBN-074	12430865						
Layer: Silver Tape			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (50 %)							
PSBN-075	12430866						
Layer: Silver Tape			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (50 %)							
PSBN-076	12430867						
Layer: Stones			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Tan Fibrous Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (10 %)	Fibrous Glass (45 %)						
Comment: Bulk complex sample.							

Client Name: Forensic Analytical Consulting Svcs

Report Number: B318755

Date Printed: 06/09/21

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
PSBN-077	12430868						
Layer: Stones			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Tan Fibrous Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (10 %)	Fibrous Glass (45 %)						
Comment: Bulk complex sample.							
PSBN-078	12430869						
Layer: Stones			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Tan Fibrous Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (10 %)	Fibrous Glass (45 %)						
Comment: Bulk complex sample.							
PSBN-079	12430870						
Layer: Stones			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Tan Fibrous Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (10 %)	Fibrous Glass (45 %)						
Comment: Bulk complex sample.							

Client Name: Forensic Analytical Consulting Svcs

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Date Printed: 06/09/21

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
PSBN-080	12430871						
Layer: Stones			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Grey Non-Fibrous Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (10 %)	Fibrous Glass (45 %)						
Comment: Bulk complex sample.							
PSBN-082	12430873						
Layer: Stones			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Tan Fibrous Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (10 %)	Fibrous Glass (45 %)						
Comment: Bulk complex sample.							
PSBN-083	12430874						
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (2 %)	Fibrous Glass (50 %)						
Comment: Bulk complex sample.							

Client Name: Forensic Analytical Consulting Svcs

Report Number: B318755

Date Printed: 06/09/21

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
PSBN-084	12430875						
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (2 %) Fibrous Glass (50 %)							
Comment: Bulk complex sample.							
PSBN-085	12430876						
Layer: Black Mastic			ND				
Layer: White Coating			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (15 %) Synthetic (10 %)							
PSBN-086	12430877						
Layer: Black Mastic			ND				
Layer: White Coating			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (15 %) Synthetic (10 %)							
PSBN-087	12430878						
Layer: Black Mastic			ND				
Layer: White Coating			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (15 %) Synthetic (10 %)							
PSBN-088	12430879						
Layer: Black Mastic			ND				
Layer: White Stones			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (15 %) Synthetic (10 %)							
PSBN-089	12430880						
Layer: Black Mastic			ND				
Layer: White Stones			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (15 %) Synthetic (10 %)							
PSBN-090	12430881						
Layer: Black Mastic			ND				
Layer: White Stones			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (15 %) Synthetic (10 %)							

Client Name: Forensic Analytical Consulting Svcs

Report Number: B318755

Date Printed: 06/09/21

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
PSBN-091	12430882						
Layer: Grey Mastic			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (15 %)	Synthetic (10 %)						
PSBN-092	12430883						
Layer: Grey Mastic			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (15 %)	Synthetic (10 %)						
PSBN-093	12430884						
Layer: White Non-Fibrous Material			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBN-094	12430885						
Layer: White Non-Fibrous Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBN-095	12430886						
Layer: Black Non-Fibrous Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBN-096	12430887						
Layer: Black Non-Fibrous Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBN-097	12430888						
Layer: White Stones			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (5 %)	Fibrous Glass (45 %)						
Comment: Bulk complex sample.							

Client Name: Forensic Analytical Consulting Svcs

Report Number: B318755

Date Printed: 06/09/21

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
PSBN-098	12430889						
Layer: White Stones			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (5 %) Fibrous Glass (45 %)							
Comment: Bulk complex sample.							
PSBN-099	12430890						
Layer: White Stones			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (5 %) Fibrous Glass (45 %)							
Comment: Bulk complex sample.							
PSBN-100	12430891						
Layer: Grey Cementitious Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBN-101	12430892						
Layer: Grey Cementitious Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBN-102	12430893						
Layer: White Non-Fibrous Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBN-103	12430894						
Layer: White Non-Fibrous Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBN-104	12430895						
Layer: White Cementitious Material			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							

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Date Printed: 06/09/21

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
PSBN-105	12430896						
Layer: White Cementitious Material			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBN-106	12430897						
Layer: White Cementitious Material			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBN-107	12430898						
Layer: White Cementitious Material			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBN-108	12430899						
Layer: White Cementitious Material			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBN-109	12430900						
Layer: Red Cementitious Material			ND				
Layer: Grey Mortar			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBN-110	12430901						
Layer: Red Cementitious Material			ND				
Layer: Grey Mortar			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBN-111	12430902						
Layer: Grey Cementitious Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBN-112	12430903						
Layer: Grey Cementitious Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBN-113	12430904						
Layer: Grey Cementitious Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							

Client Name: Forensic Analytical Consulting Svcs

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Date Printed: 06/09/21

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
PSBN-114	12430905						
Layer: Grey Cementitious Material							ND
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							



Tad Thrower, Laboratory Supervisor, Hayward Laboratory

Note: Limit of Quantification ('LOQ') = 1%. 'Trace' denotes the presence of asbestos below the LOQ. 'ND' = 'None Detected'.

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 Critical Solutions, Inc.

Site: Contra Costa College 2600 Mission Bell Drive San Pablo, CA USA

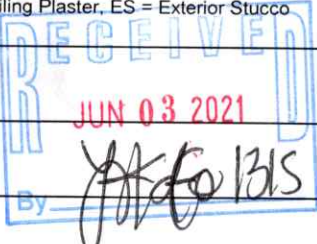
Sampled By: AA
Sample Date: 5/26/21
Proj #: PJ63338

Turnaround Time:	RUSH 24hr 48hr <u>Extended (5 days)</u>	* PRIOR POSITIVE *
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Email results to:	FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com	

HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I./Cat II.	Condition	Sample #	Sample Location	Lab result
01	12"X12" white w/ blue specks FT over brown mastic and green mastic		N	G	PSBN-001	PSB North / Rm PS-109 / SE area, floor	
↓	↓	↓	↓	↓	↓ -002	↓ / Corridor 2 / NE area, floor	
02	Gray VSF		N	G	-003	/ Corridor 1 / stairs / NW area, floor	
↓	↓	↓	↓	↓	↓ -004	↓ / ↓ / SE area, floor	
03	Blue carpet over brown mastic		N	G	-005	/ Rm PS-113 / NE area, floor	
↓	↓	↓	↓	↓	↓ -006	↓ / Rm PS-106 / SW area, floor	
04	Red carpet over brown mastic		N	G	-007	/ Rm PS-123 / NW area, floor	
↓	↓	↓	↓	↓	↓ -008	↓ / Rm PS-131 / west center area, floor	

W = Drywall, JC = Joint Compound, WT=Wall Texture, VFT = Vinyl Floor Tile, VSF = Vinyl Sheet Flooring, BB = Baseboard, BBM = Baseboard Mastic, CM = Carpet Mastic, ACT = Acoustic Ceiling Tile, ACS = Sprayed-on Acoustic Ceiling Material, FP = Fireproofing, PI = Pipe Insulation, PFI = Pipe fitting insulation, WP = Plaster, CP = Ceiling Plaster, ES = Exterior Stucco

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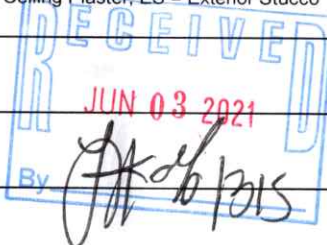
Sampled By: AA & JS
Sample Date: 5/26/21
Proj #: PJ63338

Turnaround Time:	RUSH 24hr 48hr Extended (5 days)
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Email results to:	FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com

HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I./Cat II.	Condition	Sample #	Sample Location	Lab result
09	12"X12" Red FT OVER BLACK MASTIC		N	G	PSBN-017	PSB North / PS RM 102 / W AREA / FLOOR	
↓	↓		↓	↓	-018	↓ / AREA / FLOOR	
10	12"X12" Gray w/ black dots FT OVER BLACK MASTIC		N	G	-019	PS RM 102 / S AREA / FLOOR	
↓	↓		↓	↓	-020	↓ / AREA / FLOOR	
11	2"X2" Gray ceramic FT and grout		N	G	-021	MENS BATHROOM / S AREA / FLOOR	
↓	↓		↓	↓	-022	WOMENS BATHROOM / N AREA / FLOOR	
12	Beige BBM		N	G	-023	CORRIDOR / ADS TO ENTRY 1-031	
↓	↓		↓	↓	-024	↓ / ADS TO ENTRY 1-030	

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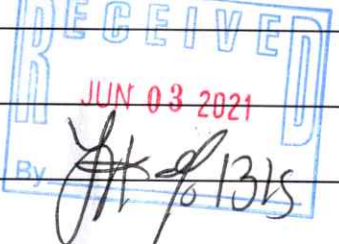
Sampled By: AA & JS
Sample Date: 5/26/21
Proj #: PJ63338

Turnaround Time:	RUSH 24hr 48hr <u>Extended (5 days)</u>
Analysis:	<input checked="" type="checkbox"/> PLM Standard: <input type="checkbox"/> PLM w/ Point Count: (<input type="checkbox"/> 400pt. <input type="checkbox"/> 1,000 pt.):
Email results to:	FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com

HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I./Cat II.	Condition	Sample #	Sample Location	Lab result
13	White wallpaper w/ adhesive		N	G	PSBN-025	PSBN-110 North / Rm PS-107 / NE area, East wall	
↓	↓ ↓		↓	↓	-026	/Corridor 2 / NW area, wall	
14	WB/JC		Y	G	-027	/Rm PS-110 / NW corner, wall	
↓	↓		↓	↓	-028	/Rm PS-107 / SE corner, wall	
↓	↓		↓	↓	-029	/Rm PS-106 / NW corner, wall	
↓	↓		↓	↓	-030	/Rm PS-132 / North corner, wall	
↓	↓		↓	↓	-031	/Corridor 3 / Rm PS-110 / NE corner, wall	
15	Wall texture large splotch		Y	G	-032	/Rm PS-101 / East center area, wall	

W = Drywall, JC = Joint Compound, WT=Wall Texture, VFT = Vinyl Floor Tile, VSF = Vinyl Sheet Flooring, BB = Baseboard, BBM = Baseboard Mastic, CM = Carpet Mastic, ACT = Acoustic Ceiling Tile, ACS = Sprayed-on Acoustic Ceiling Material, FP = Fireproofing, PI = Pipe Insulation, PFI = Pipe fitting insulation, WP = Plaster, CP = Ceiling Plaster, ES = Exterior Stucco

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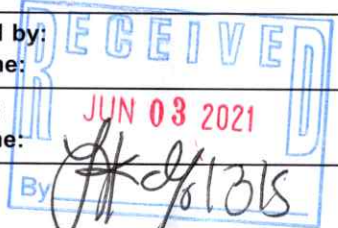
Sampled By: AA & JS
Sample Date: 5/26/21
Proj #: PJ63338

Turnaround Time:	RUSH 24hr 48hr <u>Extended (5 days)</u>
Analysis:	<input checked="" type="checkbox"/> PLM Standard: <input type="checkbox"/> PLM w/ Point Count: (<input type="checkbox"/> 400pt. <input type="checkbox"/> 1,000 pt.):
Email results to:	FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com

HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I./Cat II.	Condition	Sample #	Sample Location	Lab result
15	Wall texture large splotch		Y	G	PSBN-033	PSBN / CORRIDOR / ADJ TO PSBN RM 106 / W WALL	
	↓		↓	↓	-034	↓ / ADJ TO PSBN RM 102 / N. WALL	
	↓		↓	↓	-035	↓ / CORRIDOR / ADJ TO PSBN RM 116 / S WALL	
	↓		↓	↓	-036	↓ / ADJ TO PSBN RM 101 / S. WALL	
16	Wall texture orange peel splotch		Y	G	-037	CORRIDOR / ADJ TO PSBN RM 110 / N. WALL	
	↓		↓	↓	-038	↓ / ADJ TO MENS BATHROOM / S. WALL	
	↓		↓	↓	-039	↓ / ADJ TO WOMENS BATHROOM / S. WALL	
	↓		↓	↓	-040	↓ / PSBN RM 132 / NW CORNER / WALL	

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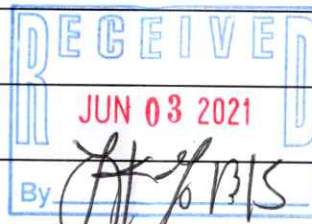
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Sample Date: 5/26/21
Proj #: PJ63338

Turnaround Time:	RUSH 24hr 48hr Extended (<u>5</u> days)
Analysis:	<input checked="" type="checkbox"/> PLM Standard: <input type="checkbox"/> PLM w/ Point Count: (<input type="checkbox"/> 400pt. <input type="checkbox"/> 1,000 pt.):
Email results to:	FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com

HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I./Cat II.	Condition	Sample #	Sample Location	Lab result
16	Wall texture orange peel splotch		Y	G	PSBN-041	PSB North / Rm PS-130 / NE area, wall	
17	Brick and mortar		N	G	-042	/ Corridor 2 / SW area, wall	
↓	↓		↓	↓	-043	/ Corridor 1 / SE area, wall	
18	2'x4' white ACT w/ pinholes		Y	G	-044	/ Central Corridor / NE area, ceiling	
↓	↓		↓	↓	-045	/ Rm PS-101 / NW area, ceiling	
19	12"x12" white ACT w/ fissures over hockey puck mastic		Y	G	-046	/ Rm PS-131 / central area, ceiling	
↓	↓		↓	↓	-047	/ Corridor 1 / SW area, ceiling	
20	Black ^{Gray} window caulking		N	G	↓ -048	↓ / Rm PS-107 / SW area, window	

W = Drywall, JC = Joint Compound, WT = Wall Texture, VFT = Vinyl Floor Tile, VSF = Vinyl Sheet Flooring, BB = Baseboard, BBM = Baseboard Mastic, CM = Carpet Mastic, ACT = Acoustic Ceiling Tile, ACS = Sprayed-on Acoustic Ceiling Material, FP = Fireproofing, PI = Pipe Insulation, PFI = Pipe fitting insulation, WP = Plaster, CP = Ceiling Plaster, ES = Exterior Stucco

Relinquished by: <u>Radzinski</u> Date and Time: <u>03 June 2021 / 12:10</u>	Relinquished by: Date and Time:	Relinquished by: Date and Time:
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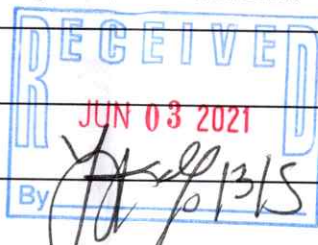
Sampled By: AA & JS
Sample Date: 5/26/21
Proj #: PJ63338

Turnaround Time:	RUSH 24hr 48hr Extended (5 days)
Analysis:	<input checked="" type="checkbox"/> PLM Standard: <input type="checkbox"/> PLM w/ Point Count: (<input type="checkbox"/> 400pt. <input type="checkbox"/> 1,000 pt.):
Email results to:	FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com

HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I./Cat II.	Condition	Sample #	Sample Location	Lab result
20	Black ^{Gray} window caulking		N	G	PSBN-049	PSB North / Rm PS-107 / NW area, window	
21	White sink undercoat		N	G	-050	/ Rm PS-130 / Under sink	
↓	↓	↓	↓	↓	-051	/ Rm PS-130 /	
22	Black sink under coat		N	G	-052	/ Rm PS-110 /	
↓	↓	↓	↓	↓	-053	/ Rm PS-110 / ↓	
23	3"x6" Red ceramic wall tile w/ grout		N	G	-054	/ Men's Restroom / SE area, South wall	
↓	↓	↓	↓	↓	-055	/ Women's Restroom / NE area, North wall	
24	Black lab table		N	G	↓ -056	↓ / Rm PS-113 / Lab table	

W = Drywall, JC = Joint Compound, WT=Wall Texture, VFT = Vinyl Floor Tile, VSF = Vinyl Sheet Flooring, BB = Baseboard, BBM = Baseboard Mastic, CM = Carpet Mastic, ACT = Acoustic Ceiling Tile, ACS = Sprayed-on Acoustic Ceiling Material, FP = Fireproofing, PI = Pipe Insulation, PFI = Pipe fitting insulation, WP = Plaster, CP = Ceiling Plaster, ES = Exterior Stucco

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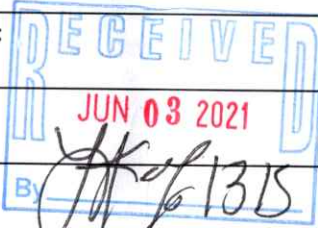
Sampled By: AA & JS
Sample Date: 5/26/21
Proj #: PJ63338

Turnaround Time:	RUSH 24hr 48hr <u>Extended (5 days)</u>
Analysis:	<input checked="" type="checkbox"/> PLM Standard: <input type="checkbox"/> PLM w/ Point Count: (<input type="checkbox"/> 400pt. <input type="checkbox"/> 1,000 pt.):
Email results to:	FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com

HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I./Cat II.	Condition	Sample #	Sample Location	Lab result
24	Black lab table		N	G	PSBN-057	PSB North / Rm PS-106 / Lab table	
25	Black window caulking		N	G	-058	/ Rm PS-109 / SW area, window	
↓	↓ ↓		↓	↓	↓ -059	↓ / Rm PS-109 / NE area, window	
26	Red firestop		N	G	-060	/ Rm PS-132 / South area, Attic wall	
↓	↓ ↓		↓	↓	↓ -061	↓ / Rm PS-110B / East center Attic area, wall	
27	Black duct tape		Y	G	-062	/ Rm PS-132 / South area, on Attic duct	
↓	↓ ↓		↓	↓	↓ -063	↓ / ↓ / SW area, on duct	
28	off-white duct vibration cloth				↓ -064	↓ / Rm PS-130 / West area, on Attic duct	

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Relinquished by: Radzinski Date and Time: 03 June 2021/310	Relinquished by: Date and Time:	Relinquished by: Date and Time:
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Site: Contra Costa College 2600 Mission Bell Drive San Pablo, CA USA

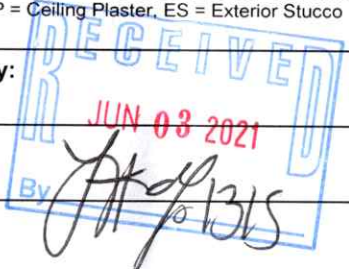
Sampled By: AA & JS
Sample Date: 5/26/21
Proj #: PJ63338

Turnaround Time:	RUSH 24hr 48hr <u>Extended (5 days)</u>
Analysis:	<input checked="" type="checkbox"/> PLM Standard: <input type="checkbox"/> PLM w/ Point Count: (<input type="checkbox"/> 400pt. <input type="checkbox"/> 1,000 pt.):
Email results to:	FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com

HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I./Cat II.	Condition	Sample #	Sample Location	Lab result
28	off-white duct vibration cloth		Y	F	PSBN-065	PSB North / Rm PS-130 Attic / West area, on duct	
29	off-white insulation wrap		Y	F	- 066	/ Rm PS-130 Attic / East area, on pipe	
↓	↓		↓	↓	- 067	/ Corridor 3 / Center area, on pipe	
↓	↓		↓	↓	- 068	/ Rm PS-110B Attic / SE area, on pipe	
30	Black fiberglass panel cloth		Y	G	- 069	/ Rm PS-132 Attic / NW area, on ceiling	
↓	↓		↓	↓	- 070	/ ↓ / NE area, on ceiling	
31	Yellow insulation mastic		Y	G	- 071	/ Rm PS-110B Attic / SE area, on tank	
↓	↓		↓	↓	↓-072	↓ / ↓ / ↓	

W = Drywall, JC = Joint Compound, WT=Wall Texture, VFT = Vinyl Floor Tile, VSF = Vinyl Sheet Flooring, BB = Baseboard, BBM = Baseboard Mastic, CM = Carpet Mastic, ACT = Acoustic Ceiling Tile, ACS = Sprayed-on Acoustic ceiling Material, FP = Fireproofing, PI = Pipe Insulation, PFI = Pipe fitting insulation, WP = Plaster, CP = Ceiling Plaster, ES = Exterior Stucco

Relinquished by: Radzinski Date and Time: 03 June 2021/1310	Relinquished by: Date and Time:	Relinquished by: Date and Time:
Received by: Date and Time:	Received by: Date and Time:	Received by: Date and Time:



Sampling Data Form / Chain of custody

Client: HAY01
FACS: San Francisco, CA Office
 Critical Solutions, Inc.

Site: Contra Costa College 2600 Mission Bell Drive San Pablo, CA USA

Sampled By: AA & JS
Sample Date: 5/26/21
Proj #: PJ63338

Turnaround Time:	RUSH 24hr 48hr Extended (<u>5</u> days)
Analysis:	<input checked="" type="checkbox"/> PLM Standard: <input type="checkbox"/> PLM w/ Point Count: (<input type="checkbox"/> 400pt. <input type="checkbox"/> 1,000 pt.):
Email results to:	FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com

HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I./Cat II.	Condition	Sample #	Sample Location	Lab result
31	Yellow insulation mastic		Y	G	PSBN-673	PSB North / RM 15-110B / SE area, on tank Attic	
32	Silver duct tape		N	F	-074	/ / / NE area, on duct	
↓	↓ ↓		↓	↓	↓ -075	↓ / ↓ / ↓	

W = Drywall, JC = Joint Compound, WT=Wall Texture, VFT = Vinyl Floor Tile, VSF = Vinyl Sheet Flooring, BB = Baseboard, BBM = Baseboard Mastic, CM = Carpet Mastic, ACT = Acoustic Ceiling Tile, ACS = Sprayed-on Acoustic Ceiling Material, FP = Fireproofing, PI = Pipe Insulation, PFI = Pipe fitting insulation, WP = Plaster, CP = Ceiling Plaster, ES = Exterior Stucco

Relinquished by: Redzinski Date and Time: 03 June 2021/1310	Relinquished by: JUN 03 2021 Date and Time: [Signature]	Relinquished by: Date and Time:
Received by: Date and Time:	Received by: [Signature] Date and Time: 1315	Received by: Date and Time:

Sampling Data Form / Chain of custody

Client: HAY01
 ACS: San Francisco, CA Office
 Critical Solutions, Inc.

Site: Contra Costa College 2600 Mission Bell Drive San Pablo, CA USA

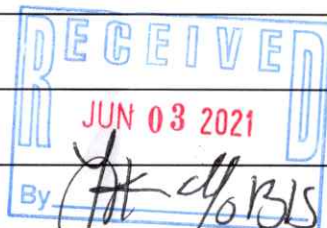
Sampled By: AA & JS
 Sample Date: 5/28/21
 Proj #: PJ63338

Turnaround Time:	RUSH	24hr	48hr	Extended (<u>5</u> days)
Analysis:	<input checked="" type="checkbox"/> PLM Standard:	<input type="checkbox"/> PLM w/ Point Count: (<input type="checkbox"/> 400pt. <input type="checkbox"/> 1,000 pt.):		
Email results to:	FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com			

HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I./Cat II.	Condition	Sample #	Sample Location	Lab result
33	Roof field		N	G	PSBN-076	PSB North Roof / Roof I / North center area, floor	
↓	↓ ↓ ↓		↓	↓	-077	↓ ↓ / Central area, floor	
34	AA Middle Upper roof field		N	G	-078	/ Roof B / Central area, floor	
↓	↓ ↓ ↓		↓	↓	-079	/ Roof J / SW area, floor	
↓	↓ ↓ ↓		↓	↓	-080	/ Roof F / Central area, floor	
<hr/>		VOID	↓	↓	-081	/	AA
33	Roof field		N	G	PSBN-082	/ Roof H / Central area, floor	
35	Upper roof field		N	G	↓ -083	↓ / Roof G / South area, floor	

N = Drywall, JC = Joint Compound, WT=Wall Texture, VFT = Vinyl Floor Tile, VSF = Vinyl Sheet Flooring, BB = Baseboard, BBM = Baseboard Mastic, CM = Carpet Mastic, ACT = Acoustic Ceiling Tile, ACS = Sprayed-on Acoustic Ceiling Material, FP = Fireproofing, PI = Pipe Insulation, PFI = Pipe fitting insulation, WP = Plaster, CP = Ceiling Plaster, ES = Exterior Stucco

Relinquished by: <u>Radzinski</u> Date and Time: <u>03 June 2021/1310</u>	Relinquished by: Date and Time:	Relinquished by: Date and Time:
Received by: Date and Time:	Received by: Date and Time:	Received by: Date and Time:



Sampling Data Form / Chain of custody

Client: HAY01
FACS: San Francisco, CA Office
 Critical Solutions, Inc.

Site: Contra Costa College 2600 Mission Bell Drive San Pablo, CA USA

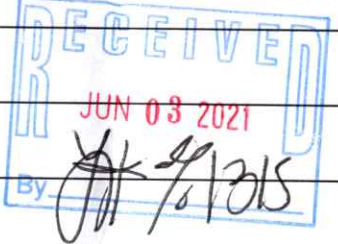
Sampled By: AA & JS
Sample Date: 5/28/21
Proj #: PJ63338

Turnaround Time:	RUSH 24hr 48hr <u>Extended (5 days)</u>
Analysis:	<u>X</u> PLM Standard: _____ PLM w/ Point Count: (_____ 400pt. _____ 1,000 pt.):
Email results to:	FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com

HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I./Cat II.	Condition	Sample #	Sample Location	Lab result
35	Upper roof field		N	G	PSBN-084	PSB North/Roof/Roof G/ North area floor	
36	Vent penetration mastic		N	G	-085	/Roof F/ ^{EAST} center area, vent	
↓	↓	↓	↓	↓	-086	/Roof I/ West center area, vent	
↓	↓	↓	↓	↓	-087	/Roof D/ East center area, vent	
37	pipe penetration mastic		N	G	-088	/Roof I/ SE-Northwest area, pipe	
↓	↓	↓	↓	↓	-089	/Roof F/ SE area, pipe	
↓	↓	↓	↓	↓	-090	/Roof B/ East center area, pipe	
38	Gray mastic		N	G	-091	/Roof B/ Adj to elec unit, floor	

W = Drywall, JC = Joint Compound, WT=Wall Texture, VFT = Vinyl Floor Tile, VSF = Vinyl Sheet Flooring, BB = Baseboard, BBM = Baseboard Mastic, CM = Carpet Mastic, ACT = Acoustic Ceiling Tile, ACS = Sprayed-on Acoustic Ceiling Material, FP = Fireproofing, PI = Pipe Insulation, PFI = Pipe fitting insulation, WP = Plaster, CP = Ceiling Plaster, ES = Exterior Stucco

Relinquished by: Redzinski Date and Time: 03 June 2021/1310	Relinquished by: Date and Time:	Relinquished by: Date and Time:
Received by: Date and Time:	Received by: Date and Time:	Received by: Date and Time:



Sampling Data Form / Chain of custody

Client: HAY01
FACS: San Francisco, CA Office
 Critical Solutions, Inc.

Site: Contra Costa College 2600 Mission Bell Drive San Pablo, CA USA

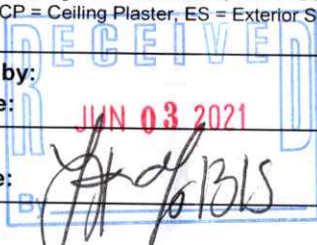
Sampled By: AA & JS
Sample Date: 6/28/21
Proj #: PJ63338

Turnaround Time:	RUSH 24hr 48hr Extended (<u>5</u> days)
Analysis:	<input checked="" type="checkbox"/> PLM Standard: <input type="checkbox"/> PLM w/ Point Count: (<input type="checkbox"/> 400pt. <input type="checkbox"/> 1,000 pt.):
Email results to:	FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com

HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I./Cat II.	Condition	Sample #	Sample Location	Lab result
38	Gray mastic		N	G	PSBN-092	PSB North / Roof B / Adj to elec unit, floor	
39	White roof caulking		N	G	-093	/Roof J / West wall	
↓	↓ ↓		↓	↓	-094	/Roof F / South wall	
40	Black roof caulking		N	G	-095	/Roof J / SE area, gutter	
↓	↓ ↓		↓	↓	-096	↓ /Roof D / NE area, gutter	
41	Roof flashing		N	G	-097	/Roof H / NW area, South wall	
↓	↓ ↓		↓	↓	-098	↓ /Roof I / NE area, North wall	
↓	↓ ↓		↓	↓	↓ -099	↓ /Roof E / NE area, North wall	

W = Drywall, JC = Joint Compound, WT=Wall Texture, VFT = Vinyl Floor Tile, VSF = Vinyl Sheet Flooring, BB = Baseboard, BBM = Baseboard Mastic, CM = Carpet Mastic, ACT = Acoustic Ceiling Tile, ACS = Sprayed-on Acoustic Ceiling Material, FP = Fireproofing, PI = Pipe Insulation, PFI = Pipe fitting insulation, WP = Plaster, CP = Ceiling Plaster, ES = Exterior Stucco

Relinquished by: Redzinski Date and Time: 03 June 2021 / 1310	Relinquished by: Date and Time: JUN 03 2021	Relinquished by: Date and Time:
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Sampling Data Form / Chain of custody

Client: HAY01

Site: Contra Costa College 2600 Mission Bell Drive San Pablo, CA USA

Sampled By: AA & JS

FACS: San Francisco, CA Office

Sample Date: 5/28/21

Critical Solutions, Inc.

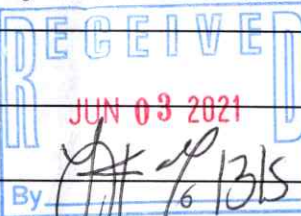
Proj #: PJ63338

Turnaround Time:	RUSH	24hr	48hr	Extended (<u>5</u> days)
Analysis:	<input checked="" type="checkbox"/> PLM Standard:	<input type="checkbox"/> PLM w/ Point Count: (<input type="checkbox"/> 400pt. <input type="checkbox"/> 1,000 pt.):		
Email results to:	FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com			

HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I./Cat II.	Condition	Sample #	Sample Location	Lab result
42	Concrete steps		N	G	PSBN-100	PSB North / Exterior / Lower Stairwell	
↓	↓ ↓ ↓		↓	↓	-101	/ / / Upper Stairwell	
43	White window caulking		N	G	-102	/ / / NW area, North wall	
↓	↓ ↓ ↓		↓	↓	-103	/ / / West center area, West wall	
44	Stucco wall		N	G	-104	/ / / NW area, Stairwell wall	
↓	↓ ↓ ↓		↓	↓	-105	/ / / North area, North wall	
↓	↓ ↓ ↓		↓	↓	-106	/ / / West center area, west wall	
↓	↓ ↓ ↓		↓	↓	↓ -107	↓ / ↓ West center area, west wall	

DW = Drywall, JC = Joint Compound, WT=Wall Texture, VFT = Vinyl Floor Tile, VSF = Vinyl Sheet Flooring, BB = Baseboard, BBM = Baseboard Mastic, CM = Carpet Mastic, ACT = Acoustic Ceiling Tile, ACS = Sprayed-on Acoustic Ceiling Material, FP = Fireproofing, PI = Pipe Insulation, PFI = Pipe fitting insulation, WP = Plaster, CP = Ceiling Plaster, ES = Exterior Stucco

Relinquished by: <u>Redzinski</u> Date and Time: <u>03 June 2021 / 1210</u>	Relinquished by: Date and Time:	Relinquished by: Date and Time:
Received by: Date and Time:	Received by: Date and Time:	Received by: Date and Time:



 JUN 03 2021

 By: [Signature] 6/13/21

Sampling Data Form / Chain of custody

Client: HAY01

Site: Contra Costa College 2600 Mission Bell Drive San Pablo, CA USA

Sampled By: AA # JS

FACS: San Francisco, CA Office

Sample Date: 5/28/21

Critical Solutions, Inc.

Proj #: PJ63338

Turnaround Time:	RUSH 24hr 48hr <u>Extended (5 days)</u>
Analysis:	<input checked="" type="checkbox"/> PLM Standard: <input type="checkbox"/> PLM w/ Point Count: (<input type="checkbox"/> 400pt. <input type="checkbox"/> 1,000 pt.):
Email results to:	FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com

HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I./Cat II.	Condition	Sample #	Sample Location	Lab result
44	Stucco wall		N	G	PSBN-108	PSB North / Exterior / West area wall	
45	Brick and mortar		N	G	-109	/ NW area, Stairwell wall	
↓	↓ ↓		↓	↓	-110	/ SW area, South wall	✓
46	Concrete floor		N	G	-111	/ NW area, floor adj to entry	
↓	↓ ↓		↓	↓	-112	/ SW area, floor	✓
47	Concrete footing		N	G	-113	/ North area, lower wall	
↓	↓ ↓		↓	↓	-114	/ SW area, West wall	✓

DW = Drywall, JC = Joint Compound, WT=Wall Texture, VFT = Vinyl Floor Tile, VSF = Vinyl Sheet Flooring, BB = Baseboard, BBM = Baseboard Mastic, CM = Carpet Mastic, ACT = Acoustic Ceiling Tile, ACS = Sprayed-on Acoustic Ceiling Material, FP = Fireproofing, PI = Pipe Insulation, PFI = Pipe fitting insulation, WP = Plaster, CP = Ceiling Plaster, ES = Exterior Stucco

Relinquished by: <i>Redzinski</i> Date and Time: <i>03 June 2021/1310</i>	Relinquished by: Date and Time:	Relinquished by: Date and Time:
Received by: Date and Time:	Received by: Date and Time:	Received by: Date and Time:



 JUN 03 2021
 By: *[Signature]*

Bulk Asbestos Analysis

(EPA Method 40CFR, Part 763, Appendix E to Subpart E and EPA 600/R-93-116, Visual Area Estimation)
NVLAP Lab Code: 101459-0

Forensic Analytical Consulting Svcs
Gary Lowe
21228 Cabot Blvd.

Hayward, CA 94545

Client ID: HAY01
Report Number: B318754
Date Received: 06/03/21
Date Analyzed: 06/09/21
Date Printed: 06/10/21
First Reported: 06/10/21

Job ID/Site: PJ63338; Critical Solutions, Inc.

SGSFL Job ID: HAY01
Total Samples Submitted: 111
Total Samples Analyzed: 91

Date(s) Collected: 05/24/2021

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
PSBS-001	12430681						
Layer: Grey Tile			ND				
Layer: Tan Mastic			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBS-002	12430682						
Layer: Grey Tile			ND				
Layer: Tan Mastic			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBS-003	12430683						
Layer: Tan Tile		Chrysotile	5 %				
Layer: Black Mastic		Chrysotile	5 %				
Total Composite Values of Fibrous Components:		Asbestos (5%)					
Cellulose (Trace)							
PSBS-004	12430684	Comment: Sample not analyzed due to prior positive result in series.					
PSBS-005	12430685						
Layer: Beige Tile			ND				
Layer: Black Mastic		Chrysotile	5 %				
Total Composite Values of Fibrous Components:		Asbestos (Trace)					
Cellulose (Trace)							
PSBS-006	12430686	Comment: Sample not analyzed due to prior positive result in series.					
PSBS-007	12430687						
Layer: Dark Grey Tile		Chrysotile	3 %				
Layer: Black Mastic		Chrysotile	5 %				
Total Composite Values of Fibrous Components:		Asbestos (3%)					
Cellulose (Trace)							
PSBS-008	12430688	Comment: Sample not analyzed due to prior positive result in series.					

Client Name: Forensic Analytical Consulting Svcs

Report Number: B318754

Date Printed: 06/10/21

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
PSBS-009	12430689						
Layer: Red Tile			ND				
Layer: Black/Yellow Mastic		Chrysotile	5 %				
Total Composite Values of Fibrous Components:		Asbestos (Trace)					
Cellulose (Trace)							
PSBS-010	12430690						
Comment: Sample not analyzed due to prior positive result in series.							
PSBS-011	12430691						
Layer: Light Brown Tile		Chrysotile	2 %				
Layer: Yellow Mastic			ND				
Total Composite Values of Fibrous Components:		Asbestos (2%)					
Cellulose (Trace)							
PSBS-012	12430692						
Comment: Sample not analyzed due to prior positive result in series.							
PSBS-013	12430693						
Layer: Grey Cementitious Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBS-014	12430694						
Layer: Grey Cementitious Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBS-015	12430695						
Layer: Tan Mastic			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBS-016	12430696						
Layer: Tan Mastic			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBS-017	12430697						
Layer: Brown Mastic			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBS-018	12430698						
Layer: Brown Mastic			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBS-019	12430699						
Layer: White Plaster			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							

Client Name: Forensic Analytical Consulting Svcs

Report Number: B318754

Date Printed: 06/10/21

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
PSBS-020	12430700						
Layer: White Plaster			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBS-021	12430701						
Layer: White Plaster			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBS-022	12430702						
Layer: White Texture			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBS-023	12430703						
Layer: White Texture			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBS-024	12430704						
Layer: White Texture			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBS-025	12430705						
Layer: Beige Fibrous Material			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (35 %) Fibrous Glass (45 %)							
PSBS-026	12430706						
Layer: Beige Fibrous Material			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (35 %) Fibrous Glass (45 %)							
PSBS-027	12430707						
Layer: Tan Fibrous Material			ND				
Layer: Tan Mastic			ND				
Layer: Brown Mastic			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (10 %)							

Client Name: Forensic Analytical Consulting Svcs

Report Number: B318754

Date Printed: 06/10/21

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
PSBS-028	12430708						
Layer: Tan Fibrous Material			ND				
Layer: Tan Mastic			ND				
Layer: Brown Mastic			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (10 %)							
PSBS-029	12430709						
Layer: Yellow Fibrous Material			ND				
Layer: Off-White Semi-Fibrous Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (2 %) Fibrous Glass (90 %)							
PSBS-030	12430710						
Layer: Yellow Fibrous Material			ND				
Layer: Off-White Semi-Fibrous Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (2 %) Fibrous Glass (90 %)							
PSBS-031	12430711						
Layer: Yellow Fibrous Material			ND				
Layer: Off-White Semi-Fibrous Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (2 %) Fibrous Glass (90 %)							
PSBS-032	12430712						
Layer: Yellow Fibrous Material			ND				
Layer: Off-White Semi-Fibrous Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (2 %) Fibrous Glass (90 %)							
PSBS-033	12430713						
Layer: Yellow Fibrous Material			ND				
Layer: Off-White Semi-Fibrous Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (2 %) Fibrous Glass (90 %)							
PSBS-034	12430714						
Layer: Yellow Fibrous Material			ND				
Layer: Off-White Semi-Fibrous Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (2 %) Fibrous Glass (90 %)							
PSBS-035	12430715						
Layer: Yellow Fibrous Material			ND				
Layer: Off-White Semi-Fibrous Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (2 %) Fibrous Glass (90 %)							

Client Name: Forensic Analytical Consulting Svcs

Report Number: B318754

Date Printed: 06/10/21

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
PSBS-036	12430716						
Layer: Grey Fibrous Material			ND				
Layer: Off-White Semi-Fibrous Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (2 %) Fibrous Glass (90 %)							
PSBS-037	12430717						
Layer: Grey Fibrous Material			ND				
Layer: Off-White Semi-Fibrous Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (2 %) Fibrous Glass (90 %)							
PSBS-038	12430718						
Layer: Red Cementitious Material			ND				
Layer: Grey Mortar			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBS-039	12430719						
Layer: Red Cementitious Material			ND				
Layer: Grey Mortar			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBS-040	12430720						
Layer: Black Non-Fibrous Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBS-041	12430721						
Layer: Black Non-Fibrous Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBS-042	12430722						
Layer: Black Semi-Fibrous Material		Chrysotile	10 %				
Total Composite Values of Fibrous Components:		Asbestos (10%)					
Cellulose (Trace)							
PSBS-043	12430723						
Comment: Sample not analyzed due to prior positive result in series.							
PSBS-044	12430724						
Layer: Grey Semi-Fibrous Material		Chrysotile	10 %				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (10%)					
Cellulose (Trace)							
PSBS-045	12430725						
Comment: Sample not analyzed due to prior positive result in series.							

Client Name: Forensic Analytical Consulting Svcs

Report Number: B318754

Date Printed: 06/10/21

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
PSBS-046	12430726						
Layer: Black Semi-Fibrous Material			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)	Fibrous Glass (70 %)						
PSBS-047	12430727						
Layer: Black Semi-Fibrous Material			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)	Fibrous Glass (70 %)						
PSBS-048	12430728						
Layer: Red Tape			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)	Synthetic (60 %)						
PSBS-049	12430729						
Layer: Red Tape			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)	Synthetic (60 %)						
PSBS-050	12430730						
Layer: Grey Semi-Fibrous Material		Chrysotile	10 %				
Layer: Black Coating			ND				
Total Composite Values of Fibrous Components:		Asbestos (10%)					
Cellulose (Trace)							
PSBS-051	12430731						
Comment: Sample not analyzed due to prior positive result in series.							
PSBS-052	12430732						
Layer: Black Coating			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBS-053	12430733						
Layer: Black Coating			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBS-054	12430734						
Layer: Red Semi-Fibrous Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)	Synthetic (10 %)						
PSBS-055	12430735						
Layer: Red Semi-Fibrous Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)	Synthetic (10 %)						

Client Name: Forensic Analytical Consulting Svcs

Report Number: B318754

Date Printed: 06/10/21

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
PSBS-056	12430736						
Layer: White Semi-Fibrous Material		Amosite	10 %	Chrysotile	5 %		
Layer: White Woven Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (14%)					
Cellulose (5 %)							
PSBS-057	12430737						
Comment: Sample not analyzed due to prior positive result in series.							
PSBS-058	12430738						
Comment: Sample not analyzed due to prior positive result in series.							
PSBS-059	12430739						
Layer: Grey Semi-Fibrous Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)	Synthetic (50 %)						
PSBS-060	12430740						
Layer: Grey Semi-Fibrous Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)	Synthetic (50 %)						
PSBS-061	12430741						
Layer: White Plaster			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBS-062	12430742						
Layer: White Plaster			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBS-063	12430743						
Layer: White Texture			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBS-064	12430744						
Layer: White Texture			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							

Client Name: Forensic Analytical Consulting Svcs

Report Number: B318754

Date Printed: 06/10/21

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
PSBS-065	12430745						
Layer: White Drywall			ND				
Layer: Off-White Joint Compound		Chrysotile	2 %				
Layer: White Tape			ND				
Layer: Off-White Joint Compound		Chrysotile	2 %				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (Trace)					
Cellulose (20 %)	Fibrous Glass (10 %)						
PSBS-066	12430746						
Comment: Sample not analyzed due to prior positive result in series.							
PSBS-067	12430747						
Comment: Sample not analyzed due to prior positive result in series.							
PSBS-068	12430748						
Layer: Grey Semi-Fibrous Material		Chrysotile	10 %	Crocidolite	5 %		
Total Composite Values of Fibrous Components:		Asbestos (15%)					
Cellulose (Trace)							
PSBS-069	12430749						
Comment: Sample not analyzed due to prior positive result in series.							
PSBS-070	12430750						
Layer: White Semi-Fibrous Material		Amosite	10 %	Chrysotile	2 %		
Total Composite Values of Fibrous Components:		Asbestos (12%)					
Cellulose (Trace)							
PSBS-071	12430751						
Comment: Sample not analyzed due to prior positive result in series.							
PSBS-072	12430752						
Layer: Grey Semi-Fibrous Material		Chrysotile	10 %				
Layer: Black Coating			ND				
Total Composite Values of Fibrous Components:		Asbestos (10%)					
Cellulose (Trace)							
PSBS-073	12430753						
Comment: Sample not analyzed due to prior positive result in series.							
PSBS-074	12430754						
Layer: Black Non-Fibrous Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBS-075	12430755						
Layer: Black Non-Fibrous Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							

Client Name: Forensic Analytical Consulting Svcs

Report Number: B318754

Date Printed: 06/10/21

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
PSBS-076	12430756						
Layer: Silver Tape			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBS-077	12430757						
Layer: Silver Tape			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBS-078	12430758						
Layer: Grey Semi-Fibrous Material		Chrysotile	10 %	Crocidolite	2 %		
Total Composite Values of Fibrous Components:		Asbestos (12%)					
Cellulose (Trace)							
PSBS-079	12430759						
Comment: Sample not analyzed due to prior positive result in series.							
PSBS-080	12430760						
Layer: White Semi-Fibrous Material		Amosite	10 %	Chrysotile	2 %		
Total Composite Values of Fibrous Components:		Asbestos (12%)					
Cellulose (Trace)							
PSBS-081	12430761						
Layer: Grey Cementitious Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBS-082	12430762						
Layer: Grey Cementitious Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBS-083	12430763						
Layer: White Non-Fibrous Material		Chrysotile	Trace				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (Trace)					
Cellulose (Trace)							
PSBS-084	12430764						
Comment: Sample not analyzed due to prior positive result in series.							
PSBS-085	12430765						
Layer: Red Cementitious Material			ND				
Layer: Grey Mortar			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							

Client Name: Forensic Analytical Consulting Svcs

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Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
PSBS-086	12430766						
Layer: Red Cementitious Material			ND				
Layer: Grey Mortar			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBS-087	12430767						
Layer: Off-White Semi-Fibrous Material		Chrysotile	5 %				
Total Composite Values of Fibrous Components:		Asbestos (5%)					
Cellulose (Trace)							
PSBS-088	12430768						
Comment: Sample not analyzed due to prior positive result in series.							
PSBS-089	12430769						
Layer: White Non-Fibrous Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBS-090	12430770						
Layer: White Non-Fibrous Material			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBS-091	12430771						
Layer: Black Semi-Fibrous Material		Chrysotile	5 %				
Total Composite Values of Fibrous Components:		Asbestos (5%)					
Cellulose (Trace)							
PSBS-092	12430772						
Comment: Sample not analyzed due to prior positive result in series.							
PSBS-093	12430773						
Layer: Grey Cementitious Material			ND				
Layer: Brown Cementitious Material			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBS-094	12430774						
Layer: Grey Cementitious Material			ND				
Layer: Brown Cementitious Material			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBS-095	12430775						
Layer: Tan Non-Fibrous Material			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							

Client Name: Forensic Analytical Consulting Svcs

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Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
PSBS-096	12430776						
Layer: Tan Non-Fibrous Material			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBS-097	12430777						
Layer: Tan Non-Fibrous Material			ND				
Layer: Paint			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBS-098	12430778						
Layer: Stones			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (5 %) Fibrous Glass (40 %)							
Comment: Bulk complex sample.							
PSBS-099	12430779						
Layer: Stones			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (5 %) Fibrous Glass (40 %)							
Comment: Bulk complex sample.							
PSBS-100	12430780						
Layer: Stones			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (5 %) Fibrous Glass (40 %)							
Comment: Bulk complex sample.							

Client Name: Forensic Analytical Consulting Svcs

Report Number: B318754

Date Printed: 06/10/21

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
PSBS-101	12430781						
Layer: Stones			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt		Chrysotile	40 %				
Layer: Black Tar			ND				
Layer: Black Felt		Chrysotile	40 %				
Total Composite Values of Fibrous Components:		Asbestos (16%)					
Cellulose (20 %) Fibrous Glass (40 %)							
Comment: Bulk complex sample.							
PSBS-102	12430782						
Layer: Stones			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (5 %) Fibrous Glass (40 %)							
Comment: Bulk complex sample.							
PSBS-103	12430783						
Layer: Stones			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Layer: Black Tar			ND				
Layer: Black Felt			ND				
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (5 %) Fibrous Glass (40 %)							
Comment: Bulk complex sample.							
PSBS-104	12430784						
Layer: Grey Mastic		Chrysotile	10 %				
Total Composite Values of Fibrous Components:		Asbestos (10%)					
Cellulose (Trace)							
PSBS-105	12430785						
Comment: Sample not analyzed due to prior positive result in series.							

Client Name: Forensic Analytical Consulting Svcs

Report Number: B318754

Date Printed: 06/10/21

Sample ID	Lab Number	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer	Asbestos Type	Percent in Layer
PSBS-106	12430786						
Layer: Black Mastic							ND
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBS-107	12430787						
Layer: Black Mastic							ND
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBS-108	12430788						
Layer: Grey Semi-Fibrous Material							ND
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace) Fibrous Glass (50 %)							
PSBS-109	12430789						
Layer: Grey Semi-Fibrous Material							ND
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace) Fibrous Glass (50 %)							
PSBS-110	12430790						
Layer: Silver Non-Fibrous Material							ND
Layer: Paint							ND
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							
PSBS-111	12430791						
Layer: Silver Non-Fibrous Material							ND
Layer: Paint							ND
Total Composite Values of Fibrous Components:		Asbestos (ND)					
Cellulose (Trace)							



Tad Thrower, Laboratory Supervisor, Hayward Laboratory

Note: Limit of Quantification ('LOQ') = 1%. 'Trace' denotes the presence of asbestos below the LOQ. 'ND' = 'None Detected'.

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Sampling Data Form / Chain of custody

Client: HAY01
FACS: San Francisco, CA Office
 Critical Solutions, Inc.

Site: Contra Costa College 2600 Mission Bell Drive San Pablo, CA USA

Sampled By: AA
Sample Date: 5/24/21
Proj #: PJ63338

Turnaround Time:	RUSH	24hr	48hr	Extended (5 days)	*PRIOR POSITIVE*
Analysis:	<input checked="" type="checkbox"/> PLM Standard:		<input type="checkbox"/> PLM w/ Point Count:		(<input type="checkbox"/> 400pt. <input type="checkbox"/> 1,000 pt.):
Email results to:	FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com				

HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I./Cat II.	Condition	Sample #	Sample Location	Lab result
01	12"x12" Gray w/ green FT over tan mastic		N	G	PSBS-001	PSB South/Corridor/SW area, floor	
↓	↓	↓	↓	↓	-002	/ ↓ /NE area, floor	
02	9"x9" Tan w/ brown streaks FT over black mastic		N	G	-003	/Rm PS-1/SE area, floor	
↓	↓	↓	↓	↓	-004	/ ↓ /NW area, floor	
03	12"x12" Beige w/ dark gray and white FT over black mastic		N	G	-005	/Rm PS-1/Central area, floor	
↓	↓	↓	↓	↓	-006	/ ↓ /NE area, floor	
04	12"x12" Dark gray w/ white streaks FT over black mastic		N	G	-007	/Rm PS-5/NE area, floor	
↓	↓	↓	↓	↓	-008	↓/Rm 108/SW area, floor	

DW = Drywall, JC = Joint Compound, WT=Wall Texture, VFT = Vinyl Floor Tile, VSF = Vinyl Sheet Flooring, BB = Baseboard, BBM = Baseboard Mastic, CM = Carpet Mastic, ACT = Acoustic Ceiling Tile, ACS = Sprayed-on Acoustic Ceiling Material, FP = Fireproofing, PI = Pipe Insulation, PFI = Pipe fitting insulation, WP = Plaster, CP = Ceiling Plaster, ES = Exterior Stucco

Relinquished by: Redzinski Date and Time: 03 June 2021/1315	Relinquished by: Date and Time:	Relinquished by: Date and Time:
Received by: Date and Time:	Received by: Date and Time:	Received by: Date and Time:

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 JUN 03 2021
 By: [Signature] 6/13/21

Sampling Data Form / Chain of custody

Client: HAY01

Site: Contra Costa College 2600 Mission Bell Drive San Pablo, CA USA

Sampled By: AA

FACS: San Francisco, CA Office

Sample Date: 5/24/21

Critical Solutions, Inc.

Proj #: PJ63338

Turnaround Time:	RUSH	24hr	48hr	Extended (<u>5</u> days)
Analysis:	<input checked="" type="checkbox"/> PLM Standard:	<input type="checkbox"/> PLM w/ Point Count: (<input type="checkbox"/> 400pt. <input type="checkbox"/> 1,000 pt.):		
Email results to:	FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com			

HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I./Cat II.	Condition	Sample #	Sample Location	Lab result
05	12"x12" Red w/ black streaks FT over black and yellow mastic		N	G	PSBS-009	PSB South / Rm PS-5 / SE area, floor	
↓	↓	↓	↓	↓	-010	↓ / ↓ / ↓	
06	12"x12" light brown w/ white streaks FT over yellow mastic		N	G	-011	/ Rm PS-5 / SW area, floor	
↓	↓	↓	↓	↓	-012	↓ / ↓ / ↓	
07	Concrete floor		N	G	-013	/ Rm PS-6 / SE area, floor	
↓	↓	↓	↓	↓	-014	/ Rm-PS-19 / NE area, floor	
08	Tan BBM		N	G	-015	/ Corridor / SW area, wall adj to PS-6	
↓	↓	↓	↓	↓	-016	↓ / ↓ / NE area, wall adj to PS-19	

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Relinquished by: Radzinski
 Date and Time: 03 June 2021/1315

Received by:
 Date and Time:

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 Date and Time:

Received by:
 Date and Time:



Relinquished by:
 Date and Time:

Received by:
 Date and Time:

Sampling Data Form / Chain of custody

Client: HAY01
ACS: San Francisco, CA Office
 Critical Solutions, Inc.

Site: Contra Costa College 2600 Mission Bell Drive San Pablo, CA USA


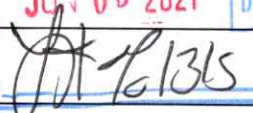
Sampled By: AA
Sample Date: 6/24/21
Proj #: PJ63338

Turnaround Time:	RUSH 24hr 48hr Extended (<u>5</u> days)
Analysis:	<input checked="" type="checkbox"/> PLM Standard: <input type="checkbox"/> PLM w/ Point Count: (<input type="checkbox"/> 400pt. <input type="checkbox"/> 1,000 pt.):
Email results to:	FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com

HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I./Cat II.	Condition	Sample #	Sample Location	Lab result
09	Black BBM		N	G	PSBS-017	PSB South / Rm PS-6 / Central area	
↓	↓ ↓		↓	↓	-018	/ Rm PS-14 / ↓	
10	Plaster wall		N	G	-019	/ Rm PS-2 / NE area, wall	
↓	↓ ↓		↓	↓	-020	/ Corridor / Central area, South wall	
↓	↓ ↓		↓	↓	-021	/ Rm PS-14 / East wall, Center area	
11	Wall texture		Y	G	-022	/ Corridor / SW area, West wall	
↓	↓ ↓		↓	↓	-023	/ Rm PS-10 / East wall, Central area	
↓	↓ ↓		↓	↓	-024	↓ / Corridor / NE area, North wall	

W = Drywall, JC = Joint Compound, WT=Wall Texture, VFT = Vinyl Floor Tile, VSF = Vinyl Sheet Flooring, BB = Baseboard, BBM = Baseboard Mastic, CM = Carpet Mastic, ACT = Acoustic Ceiling Tile, ACS = Sprayed-on Acoustic Ceiling Material, FP = Fireproofing, PI = Pipe Insulation, PFI = Pipe fitting insulation, WP = Plaster, CP = Ceiling Plaster, ES = Exterior Stucco

Relinquished by: Radzinski Date and Time: 03 June 2021 / 1315	Relinquished by: Date and Time:	Relinquished by: Date and Time:
Received by: Date and Time:	Received by: Date and Time:	Received by: Date and Time:


 By:  6/13/21

Client: HAY01
FACS: San Francisco, CA Office
 Critical Solutions, Inc.

Site: Contra Costa College 2600 Mission Bell Drive San Pablo, CA USA

Sampled By: AA
Sample Date: 5/24/21
Proj #: PJ63338

Turnaround Time:	RUSH	24hr	48hr	Extended (<u>5</u> days)
Analysis:	<input checked="" type="checkbox"/> PLM Standard:	<input type="checkbox"/> PLM w/ Point Count: (<u> </u> 400pt. <u> </u> 1,000 pt.):		
Email results to:	FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com			

HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I./Cat II.	Condition	Sample #	Sample Location	Lab result
12	2'x4' white ACT w/ pinholes		Y	G	PSBS-025	PSB South / Corridor / SW area, ceiling	
↓	↓ ↓ ↓		↓	↓	-026	↓ ↓ / NE area, ceiling	
13	12"x12" white ACT w/ hockey peck mastic		Y	G	-027	/ Corridor / SW area, ceiling	
↓	↓ ↓ ↓		↓	↓	-028	/ Rm PS-5 / Central area, ceiling	
11	Pipe insulation (run) PIPE WRAP		Y	G	-029	/ Corridor	JLA
↓	↓ ↓ ↓		↓	↓	-	/	JLA
↓	↓ ↓ ↓		↓	↓	-	/	JLA
14	yellow pipe insulation wrap		N → AA	G	↓ -029	↓ / Corridor / west area	

W = Drywall, JC = Joint Compound, WT=Wall Texture, VFT = Vinyl Floor Tile, VSF = Vinyl Sheet Flooring, BB = Baseboard, BBM = Baseboard Mastic, CM = Carpet Mastic, ACT = Acoustic Ceiling Tile, ACS = Sprayed-on Acoustic ceiling Material, FP = Fireproofing, PI = Pipe Insulation, PFI = Pipe fitting insulation, WP = Plaster, CP = Ceiling Plaster, ES = Exterior Stucco

Relinquished by: <u>Redzinski</u> Date and Time: <u>03 June 2021/1315</u>	Relinquished by: Date and Time:	Relinquished by: Date and Time:
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 By: [Signature] 6/3/21

Sampling Data Form / Chain of custody

Client: HAY01
ACS: San Francisco, CA Office
 Critical Solutions, Inc.

Site: Contra Costa College 2600 Mission Bell Drive San Pablo, CA USA

Sampled By: AA
Sample Date: 5/24/21
Proj #: PJ63338

Turnaround Time:	RUSH 24hr 48hr Extended (5 days)
Analysis:	<input checked="" type="checkbox"/> PLM Standard: <input type="checkbox"/> PLM w/ Point Count: (<input type="checkbox"/> 400pt. <input type="checkbox"/> 1,000 pt.):
Email results to:	FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com

HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I./Cat II.	Condition	Sample #	Sample Location	Lab result
14	yellow pipe insulation wrap		N Y AA	G	PSBB PSB-030	SD south / Corridor / west Area	
↓	↓		↓	↓	-031	/ Corridor / west Area	
15	off-white pipe insulation wrap		N Y AA	G	-032	/Rm PS-2 / central area	
↓	↓		↓	↓	-033	/Rm PS-2 / south area	
↓	↓		↓	↓	-034	/Rm PS-12 PS-12 / SE area	
16	off white duct insulation wrap Beige duct tape AA		N	G	-035	/Rm PS-2 / Central area	
↓	↓		↓	↓	-036	/Rm PS-12 PS-12 / East central area	
↓	↓		↓	↓	-037	/Rm PS-12 PS-12 / East central area	

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Relinquished by: Redzinski Date and Time: 03 June 2021 / 1315	Relinquished by: Date and Time:	Relinquished by: Date and Time:
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Sampling Data Form / Chain of custody

Client: HAY01
FACS: San Francisco, CA Office
 Critical Solutions, Inc.

Site: Contra Costa College 2600 Mission Bell Drive San Pablo, CA USA

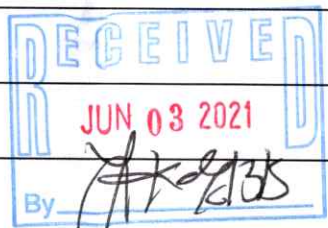
Sampled By: AA
Sample Date: 5/24/21
Proj #: PJ63338

Turnaround Time:	RUSH 24hr 48hr <u>Extended (5 days)</u>
Analysis:	<input checked="" type="checkbox"/> PLM Standard: <input type="checkbox"/> PLM w/ Point Count: (<input type="checkbox"/> 400pt. <input type="checkbox"/> 1,000 pt.):
Email results to:	FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com

HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I/Cat II.	Condition	Sample #	Sample Location	Lab result
17	Brick and mortar		N	G	PSBS-038	PSB South/Corridor/NW area, North wall	
↓	↓	↓	↓	↓	-039	/Rm PS-1 / SE area, East wall	
18	Black lab table		N	G	-040	/Rm PS-5 / Central area, lab table ↓ AA	
↓	↓	↓	↓	↓	-041	/Rm PS-6 / NE area, lab table	
19	Black exhaust system table top		N	G	-042	/Rm PS-6 / West central area	
↓	↓	↓	↓	↓	-043	/Rm PS-14 / East central area	
20	Gray exhaust system transite panel		N	G	-044	/Rm PS-5 / SW area	
↓	↓	↓	↓	↓	-045	↓ /Rm PS-5 / SW area	

W = Drywall, JC = Joint Compound, WT=Wall Texture, VFT = Vinyl Floor Tile, VSF = Vinyl Sheet Flooring, BB = Baseboard, BBM = Baseboard Mastic, CM = Carpet Mastic, ACT = Acoustic Ceiling Tile, ACS = Sprayed-on Acoustic ceiling Material, FP = Fireproofing, PI = Pipe Insulation, PFI = Pipe fitting insulation, WP = Plaster, CP = Ceiling Plaster, ES = Exterior Stucco

Relinquished by: <i>Radzinski</i> Date and Time: <i>03 June 2021/1370</i>	Relinquished by: Date and Time:	Relinquished by: Date and Time:
Received by: Date and Time:	Received by: Date and Time:	Received by: Date and Time:



Sampling Data Form / Chain of custody

Client: HAY01
 ACS: San Francisco, CA Office
 Critical Solutions, Inc.

Site: Contra Costa College 2600 Mission Bell Drive San Pablo, CA USA

Sampled By: AA
 Sample Date: 5/24/21
 Proj #: PJ63338

Turnaround Time:	RUSH	24hr	48hr	Extended (<u>5</u> days)
Analysis:	<input checked="" type="checkbox"/> PLM Standard:	<input type="checkbox"/> PLM w/ Point Count: (<u> </u> 400pt. <u> </u> 1,000 pt.):		
Email results to:	FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com			

HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I./Cat II.	Condition	Sample #	Sample Location	Lab result
21	Exhaust system duct gasket + AA vibration cloth		N	G	PSBS-046	PSB South/Rm PS-5/SW area	
↓	↓	↓	↓	↓	-047	/	
22	Red duct tape		N	G	-048	/	
↓	↓	↓	↓	↓	-049	/ ↓ / ↓	
23	Black exhaust system transite panel		N	G	-050	/Rm PS-6/ West center area	
↓	↓	↓	↓	↓	-051	/Rm PS-14/ East center area	
24	Black sink undercoat		N	G	-052	/Rm PS-12/ Under sink	
↓	↓	↓	↓	↓	-053	↓ /Rm PS-19/ Under sink	

W = Drywall, JC = Joint Compound, WT=Wall Texture, VFT = Vinyl Floor Tile, VSF = Vinyl Sheet Flooring, BB = Baseboard, BBM = Baseboard Mastic, CM = Carpet Mastic, ACT = Acoustic Ceiling Tile, ACS = Sprayed-on Acoustic Ceiling Material, FP = Fireproofing, PI = Pipe Insulation, PFI = Pipe fitting insulation, WP = Plaster, CP = Ceiling Plaster, ES = Exterior Stucco

Relinquished by: <u>Radezinski</u> Date and Time: <u>03 June 2021/1310</u>	Relinquished by: Date and Time:	Relinquished by: Date and Time:
Received by: Date and Time:	Received by: Date and Time:	Received by: Date and Time:



Sampling Data Form / Chain of custody

Client: HAY01
FACS: San Francisco, CA Office
 Critical Solutions, Inc.

Site: Contra Costa College 2600 Mission Bell Drive San Pablo, CA USA

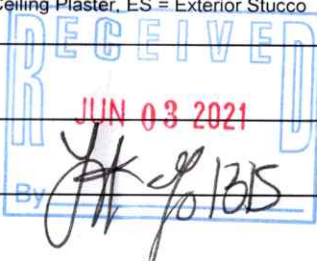
Sampled By: AA
Sample Date: 5/24/21
Proj #: PJ63338

Turnaround Time:	RUSH 24hr 48hr <u>Extended (5 days)</u>
Analysis:	<u>X</u> PLM Standard: _____ PLM w/ Point Count: (_____ 400pt. _____ 1,000 pt.):
Email results to:	FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com

HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I./Cat II.	Condition	Sample #	Sample Location	Lab result
25	Red Firestop		N	G	PSBS-054	PSB South / Rm 108 / South center area, wall	
↓	↓	↓	↓	↓	-055	↓ / North center area, wall	
26	White insulation packing		Y	F	-056	/ Rm PS-12 / SE area	
↓	↓	↓	↓	↓	-057	/ Rm PS-2 / South center area	
↓	↓	↓	↓	↓	-058	/ Rm PS-12 / SW area	
27	Duct joint cloth		N	P	-059	/ Rm PS-12 / East central area	
↓	↓	↓	↓	↓	-060	↓ / West central area	
10	Plaster wall		N	G	↓ 061	↓ / Rm PS-11 / East wall, center area	

W = Drywall, JC = Joint Compound, WT=Wall Texture, VFT = Vinyl Floor Tile, VSF = Vinyl Sheet Flooring, BB = Baseboard, BBM = Baseboard Mastic, CM = Carpet Mastic, ACT = Acoustic Ceiling Tile, ACS = Sprayed-on Acoustic Ceiling Material, FP = Fireproofing, PI = Pipe Insulation, PFI = Pipe fitting insulation, WP = Plaster, CP = Ceiling Plaster, ES = Exterior Stucco

Relinquished by: Radeinski Date and Time: 03 June 2021 / 1315	Relinquished by: Date and Time:	Relinquished by: Date and Time:
Received by: Date and Time:	Received by: Date and Time:	Received by: Date and Time:



Sampling Data Form / Chain of custody

Client: HAY01
 ACS: San Francisco, CA Office
 Critical Solutions, Inc.

Site: Contra Costa College 2600 Mission Bell Drive San Pablo, CA USA

Sampled By: AA
 Sample Date: 5/24/21
 Proj #: PJ63338

Turnaround Time:	RUSH	24hr	48hr	Extended (<u>5</u> days)
Analysis:	<input checked="" type="checkbox"/> PLM Standard:	<input type="checkbox"/> PLM w/ Point Count: (<input type="checkbox"/> 400pt. <input type="checkbox"/> 1,000 pt.):		
Email results to:	FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com			

HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I./Cat II.	Condition	Sample #	Sample Location	Lab result
10	Plaster wall		N	G	PSBS-062	PSB South / Rm PS-15 / NE area, East Wall	
11	Wall texture		Y	G	-063	/ Rm PS-10 / South wall center area	
↓	↓ ↓ ↓		↓	↓	-064	/ Corridor / North wall, center area	
28	WB/JC		Y	G	-065	/ Rm PS-19 / NE area, @ wall/ceiling	
↓	↓ ↓ ↓		↓	↓	-066	/ Rm 108 / SW corner, wall	
↓	↓ ↓ ↓		↓	↓	-067	/ Rm PS-1 / SE area, wall	
29	off white transite pipe fitting		N	G	-068	/ Rm PS-2 / water heater closet, pipe	
↓	↓ ↓ ↓		↓	↓	-069	/ ↓ ↓ ↓	

W = Drywall, JC = Joint Compound, WT=Wall Texture, VFT = Vinyl Floor Tile, VSF = Vinyl Sheet Flooring, BB = Baseboard, BBM = Baseboard Mastic, CM = Carpet Mastic, ACT = Acoustic Ceiling Tile, ACS = Sprayed-on Acoustic Ceiling Material, FP = Fireproofing, PI = Pipe Insulation, PFI = Pipe fitting insulation, WP = Plaster, CP = Ceiling Plaster, ES = Exterior Stucco

Relinquished by: <u>Radzinski</u> Date and Time: <u>03 June 2021/1315</u>	Relinquished by: Date and Time:	Relinquished by: Date and Time:
Received by: Date and Time:	Received by: Date and Time:	Received by: Date and Time:



Client: HAY01
 ACS: San Francisco, CA Office
 Critical Solutions, Inc.

Site: Contra Costa College 2600 Mission Bell Drive San Pablo, CA USA

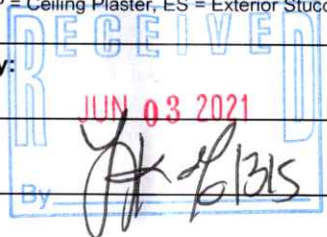
Sampled By: AA
 Sample Date: 5/24/21
 Proj #: PJ63338

Turnaround Time:	RUSH 24hr 48hr <u>Extended (5 days)</u>
Analysis:	<input checked="" type="checkbox"/> PLM Standard: <input type="checkbox"/> PLM w/ Point Count: (<input type="checkbox"/> 400pt. <input type="checkbox"/> 1,000 pt.):
Email results to:	FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com

HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I./Cat II.	Condition	Sample #	Sample Location	Lab result
30	pipe penetration tape and mastic and insulation		N	G	PSBS-070	PSB South / Rm PS-2 / Water closet, pipe penetration	
↓	↓	↓	↓	↓	-071	↓	
31	Transite exhaust hood		N	G	-072	/Rm PS-6/ East center area	
↓	↓	↓	↓	↓	-073	/Rm PS-14/ West center area	
32	Black lab floor mat		N	G	-074	/Rm PS-12/SW area, floor	
↓	↓	↓	↓	↓	-075	↓	
33	Silver duct tape		N	G	-076	/ Central area, on duct	
↓	↓	↓	↓	↓	-077	↓	

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Relinquished by: <i>Rajzinski</i> Date and Time: <i>03 June 2021 / 1315</i>	Relinquished by: Date and Time: <i>JUN 03 2021</i>	Relinquished by: Date and Time:
Received by: Date and Time:	Received by: <i>[Signature]</i> Date and Time: <i>6/13/21</i>	Received by: Date and Time:



Sampling Data Form / Chain of custody

Client: HAY01
 ACS: San Francisco, CA Office
 Critical Solutions, Inc.

Site: Contra Costa College 2600 Mission Bell Drive San Pablo, CA USA

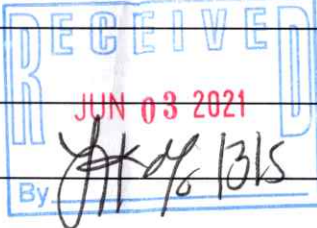
Sampled By: AA & JS
 Sample Date: 5/24/21 - 5/28/21
 Proj #: PJ63338

Turnaround Time:	RUSH	24hr	48hr	Extended (<u>5</u> days)
Analysis:	<input checked="" type="checkbox"/> PLM Standard:	<input type="checkbox"/> PLM w/ Point Count: (<input type="checkbox"/> 400pt. <input type="checkbox"/> 1,000 pt.):		
Email results to:	FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com			

HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I./Cat II.	Condition	Sample #	Sample Location	Lab result
34	White transite pipe		N	G	PSBS-078	PSB South / Rm PS-2 / Water heater closet, pipe	
↓	↓ ↓ ↓		↓	↓	↓ -079	↓ / ↓ / ↓	
30	PIPE penetration tape and insulation		Y	G	PSBS-080	↓ / ↓ / ↓	
35	CONCRETE SLAB		N	G	PSBS-081	PSB South Exterior / SW area, South wall	
↓	↓ ↓ ↓ ↓		↓	↓	↓ -082	↓ / South center area South wall	
36	White window caulking		N	G	↓ -083	↓ / North center area, window	
↓	↓ ↓ ↓		↓	↓	↓ -084	↓ / NW area, window	
37	Brick and mortar		N	G	↓ -085	↓ / NW area, North wall	

W = Drywall, JC = Joint Compound, WT=Wall Texture, VFT = Vinyl Floor Tile, VSF = Vinyl Sheet Flooring, BB = Baseboard, BBM = Baseboard Mastic, CM = Carpet Mastic, ACT = Acoustic Ceiling Tile, ACS = Sprayed-on Acoustic Ceiling Material, FP = Fireproofing, PI = Pipe Insulation, PFI = Pipe fitting insulation, WP = Plaster, CP = Ceiling Plaster, ES = Exterior Stucco

Relinquished by: <u>Radzinski</u> Date and Time: <u>03 June 2021/1915</u>	Relinquished by: Date and Time:	Relinquished by: Date and Time:
Received by: Date and Time:	Received by: Date and Time:	Received by: Date and Time:



Sampling Data Form / Chain of custody

Client: HAY01
FACS: San Francisco, CA Office
 Critical Solutions, Inc.

Site: Contra Costa College 2600 Mission Bell Drive San Pablo, CA USA

Sampled By: AA #JS
Sample Date: 5/24/21 - 5/28/21
Proj #: PJ63338

Turnaround Time:	RUSH	24hr	48hr	Extended (<u>5</u> days)
Analysis:	<input checked="" type="checkbox"/> PLM Standard:	<input type="checkbox"/> PLM w/ Point Count: (<u> </u> 400pt. <u> </u> 1,000 pt.):		
Email results to:	FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com			

HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I./Cat II.	Condition	Sample #	Sample Location	Lab result
37	Brick and mortar		N	G	PSBS-086	BB South Exterior / SE area, East wall	
38	off-white expansion joint		N	G	-087	/ SW corner, wall	
↓	↓ ↓ ↓		↓	↓	-088	/ ↓	
39	White sealant		N	G	-089	South / AA SE area, South wall	
↓	↓ ↓ ↓		↓	↓	-090	/ ↓	
40	Black caulking		N	G	-091	South / AA SE area, South wall	
↓	↓ ↓ ↓		N G A	↓	-092	/ South center area South wall	
41	Concrete wall		N	G	-093	South center area, South wall	

DW = Drywall, JC = Joint Compound, WT=Wall Texture, VFT = Vinyl Floor Tile, VSF = Vinyl Sheet Flooring, BB = Baseboard, BBM = Baseboard Mastic, CM = Carpet Mastic, ACT = Acoustic Ceiling Tile, ACS = Sprayed-on Acoustic Ceiling Material, FP = Fireproofing, PI = Pipe Insulation, PFI = Pipe fitting insulation, WP = Plaster, CP = Ceiling Plaster, ES = Exterior Stucco

Relinquished by: <i>Radzinski</i> Date and Time: <i>03 June 2021 / 1315</i>	Relinquished by: Date and Time: JUN 03 2021	Relinquished by: Date and Time:
Received by: Date and Time:	Received by: Date and Time: By <i>[Signature]</i> 6/13/21	Received by: Date and Time:

Sampling Data Form / Chain of custody

Client: HAY01

Site: Contra Costa College 2600 Mission Bell Drive San Pablo, CA USA

Sampled By: AA#US

FACS: San Francisco, CA Office

Sample Date: 5/24/21 - 5/28/21


Critical Solutions, Inc.

Proj #: PJ63338

Turnaround Time:	RUSH	24hr	48hr	Extended (<u>5</u> days)
Analysis:	<input checked="" type="checkbox"/> PLM Standard:	<input type="checkbox"/> PLM w/ Point Count: (<u> </u> 400pt. <u> </u> 1,000 pt.):		
Email results to:	FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com			

HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I./Cat II.	Condition	Sample #	Sample Location	Lab result
41	Concrete wall		N	G	PSBS-094	PSB South Exterior / Southeast area East wall	
42	Stucco siding		N	G	- 095	/ SE area, South wall	
↓	↓		↓	↓	- 096	↓ / ↓	
↓	↓		↓	↓	- 097	↓ / ↓	
43	UPPER ROOF FIELD		N	G	- 098	PSB South Roof / SE area, floor	
↓	↓		↓	↓	- 099	↓ / NW area, floor	
44	ROOF FLASHING		N	G	- 100	/ East area, flashing	
↓	↓		↓	↓	- 101	↓ / West area, flashing	

DW = Drywall, JC = Joint Compound, WT=Wall Texture, VFT = Vinyl Floor Tile, VSF = Vinyl Sheet Flooring, BB = Baseboard, BBM = Baseboard Mastic, CM = Carpet Mastic, ACT = Acoustic Ceiling Tile, ACS = Sprayed-on Acoustic Ceiling Material, FP = Fireproofing, PI = Pipe Insulation, PFI = Pipe fitting insulation, WP = Plaster, CP = Ceiling Plaster, ES = Exterior Stucco

Relinquished by: <u>Rajzinski</u> Date and Time: <u>03 June 2021 / 1315</u>	Relinquished by:  Date and Time: <u>JUN 03 2021</u>	Relinquished by: Date and Time:
Received by: Date and Time:	Received by: <u>[Signature]</u> Date and Time: <u>[Signature]</u>	Received by: Date and Time:

By: [Signature]

Sampling Data Form / Chain of custody

Client: HAY01
FACS: San Francisco, CA Office
 Critical Solutions, Inc.

Site: Contra Costa College 2600 Mission Bell Drive San Pablo, CA USA

Sampled By: AA & JS
Sample Date: 5/24/21 - 5/28/21
Proj #: PJ63338

Turnaround Time:	RUSH 24hr 48hr <u>Extended (5 days)</u>
Analysis:	<input checked="" type="checkbox"/> PLM Standard: <input type="checkbox"/> PLM w/ Point Count: (<input type="checkbox"/> 400pt. <input type="checkbox"/> 1,000 pt.):
Email results to:	FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com

HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I./Cat II.	Condition	Sample #	Sample Location	Lab result
45	LOWER ROOF FIELD		N	G	PSBS-102	PSB South/SW area, floor Roof	
↓	↓ ↓ ↓		↓	↓	- 103	NE area, floor	
46	GRAY SEALANT		N	G	- 104	NW area, skylight	
↓	↓ ↓ ↓		↓	↓	- 105	SE area, skylight	
47	Black ^{PIPE} duct penetration mastic AA		N	G	- 106	North center area, pipe	
↓	↓ ↓		↓	↓	- 107	South center area, pipe	
48	Gray vibration cloth		N	G	- 108	SE area, duct	
↓	↓ ↓		↓	↓	- 109	NW area, duct	

DW = Drywall, JC = Joint Compound, WT=Wall Texture, VFT = Vinyl Floor Tile, VSF = Vinyl Sheet Flooring, BB = Baseboard, BBM = Baseboard Mastic, CM = Carpet Mastic, ACT = Acoustic Ceiling Tile, ACS = Sprayed-on Acoustic Ceiling Material, FP = Fireproofing, PI = Pipe Insulation, PFI = Pipe fitting insulation, WP = Plaster, CP = Ceiling Plaster, ES = Exterior Stucco

Relinquished by: Redzinski Date and Time: 03 June 2021/1315	Relinquished by: Date and Time:	Relinquished by: Date and Time:
Received by: Date and Time:	Received by: Date and Time:	Received by: Date and Time:



Sampling Data Form / Chain of custody

Client: HAY01
FACS: San Francisco, CA Office
 Critical Solutions, Inc.

Site: Contra Costa College 2600 Mission Bell Drive San Pablo, CA USA

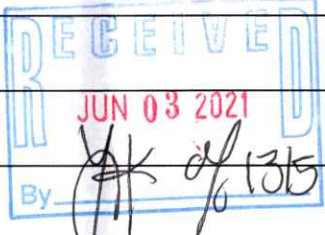
Sampled By: AA & JS
Sample Date: 5/24/21 - 5/28/21
Proj #: PJ63338

Turnaround Time:	RUSH 24hr 48hr <u>Extended (5 days)</u>
Analysis:	<u>X</u> PLM Standard: PLM w/ Point Count: (400pt. 1,000 pt.):
Email results to:	FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com

HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I./Cat II.	Condition	Sample #	Sample Location	Lab result
49	gray duct mastic		N	G	PSBS-110	PSB South / SE area, duct Roof	
↓	↓ ↓		↓	↓	↓ -111	↓ / NW area, duct	

DW = Drywall, JC = Joint Compound, WT=Wall Texture, VFT = Vinyl Floor Tile, VSF = Vinyl Sheet Flooring, BB = Baseboard, BBM = Baseboard Mastic, CM = Carpet Mastic, ACT = Acoustic Ceiling Tile, ACS = Sprayed-on Acoustic Ceiling Material, FP = Fireproofing, PI = Pipe Insulation, PFI = Pipe fitting insulation, WP = Plaster, CP = Ceiling Plaster, ES = Exterior Stucco

Relinquished by: <i>Radzinski</i> Date and Time: <i>03 June 2021 / 1315</i>	Relinquished by: Date and Time:	Relinquished by: Date and Time:
Received by: Date and Time:	Received by: Date and Time:	Received by: Date and Time:



MICRO ANALYTICAL LABORATORIES, INC.

LEAD IN PAINT - FLAME AAS (SW846)



1212
Gary Lowe
Forensic Analytical Consulting
21228 Cabot Boulevard
Hayward, CA 94545

PROJECT:
PROJECT NO. PJ63338
CLIENT'S NO. C26770
CONTRA COSTA COLLEGE
2600 MISSION BELL DRIVE
SAN PABLO, CA
BIOLOGICAL SCIENCE BUILDING

Micro Log In 281875
Total Samples 24
Date Sampled 05/24/2021
Date Received 06/02/2021
Date Analyzed 06/03/2021

Sample ID	Weight Percent	mg/kg (ppm)	RDL
Client: BIO-PB001 Lab: 281875-01 ROOM 18 SOUTHEAST CORNER WALL - WALL ORANGE DRYWALL	0.33 %	3300	0.0370 % 370 mg/kg
Client: BIO-PB003 Lab: 281875-02 ROOM 26 SOUTHEAST COUNTER WALL BEIGE DRYWALL	0.14 %	1400	0.0079 % 79 mg/kg
Client: BIO-PB005 Lab: 281875-03 ROOM 12 SOUTHEAST WALL WALL - OFF-WHITE DRYWALL	< 0.0078 %	< 78	0.0078 % 78 mg/kg
Client: BIO-PB006 Lab: 281875-04 ROOM 43 NORTHEAST CORNER WALL OFF-WHITE PLASTER	0.38 %	3800	0.0370 % 370 mg/kg
Client: BIO-PB007 Lab: 281875-05 ROOM 33 CENTER I BEAM I-BEAM BLACK METAL	0.75 %	7500	0.0790 % 790 mg/kg

Technical Supervisor: 

Long T. Nguyen, Chemistry Supervisor

6/3/2021

Date Reported

Analyst: KG

KG

AIHA-LAP, LLC Accredited Laboratory, ID #101768. Samples are analyzed by Flame Atomic Absorption Spectrometry (AAS) using SOP 23-Paint. This SOP is based on U.S. EPA SW-846 Method 7420 for instrumental analysis, and on ASTM E-1645-16 for nitric acid and hydrogen peroxide digestion. Unless otherwise indicated on this report, all required Quality Control samples have been determined to be in control prior to releasing these analytical results. Unless otherwise stated in this report, all samples were received in acceptable condition for analysis. Note: due to software limitations, the number of reported significant figures does not necessarily reflect the uncertainty of the analysis. If the amount of sample available for analysis is lower than advisable for this method, detection limits and uncertainty will be higher. This report must not be reproduced except in full, without the approval of Micro Analytical Laboratories, Inc., and pertains only to the samples analyzed as received. Unit explanations: mg = milligrams; kg = kilograms; ppm = parts per million. N/A = Not Applicable. RDL = Report Detection Limit.

MICRO ANALYTICAL LABORATORIES, INC.

LEAD IN PAINT - FLAME AAS (SW846)



1212

Gary Lowe

Forensic Analytical Consulting

21228 Cabot Boulevard

Hayward, CA 94545

PROJECT:

PROJECT NO. PJ63338

CLIENT'S NO. C26770

CONTRA COSTA COLLEGE

2600 MISSION BELL DRIVE

SAN PABLO, CA

BIOLOGICAL SCIENCE BUILDING

Micro Log In 281875

Total Samples 24

Date Sampled 05/24/2021

Date Received 06/02/2021

Date Analyzed 06/03/2021

Sample ID	Weight Percent	mg/kg (ppm)	RDL
Client: BIO-PB008 Lab: 281875-06 CORRIDOR ROOM 37 DOOR TRIM WALL TRIM WHITE WOOD	0.035 %	350	0.0075 % 75 mg/kg
Client: BIO-PB009 Lab: 281875-07 CORRIDOR SOUTH END WEST WALL WALL LIGHT BLUE DRYWALL	< 0.0081 %	< 81	0.0081 % 81 mg/kg
Client: BIO-PB010 Lab: 281875-08 CORRIDOR SOUTH END DOOR 7 DOOR BLUE WOOD	0.037 %	370	0.0077 % 77 mg/kg
Client: BIO-PB011 Lab: 281875-09 ROOM 1 SOUTHWEST ADJACENT ROOM TO ELECTRICAL BEAM OFF-WHITE WOOD	0.21 %	2100	0.0320 % 320 mg/kg
Client: BIO-PB012 Lab: 281875-10 ROOM 1 SOUTHEAST WALL WALL BEIGE METAL	0.016 %	160	0.0075 % 75 mg/kg

Technical Supervisor:

Long T. Nguyen, Chemistry Supervisor

6/3/2021

Date Reported

Analyst:

KG

AIHA-LAP, LLC Accredited Laboratory, ID #101768. Samples are analyzed by Flame Atomic Absorption Spectrometry (AAS) using SOP 23-Paint. This SOP is based on U.S. EPA SW-846 Method 7420 for instrumental analysis, and on ASTM E-1645-16 for nitric acid and hydrogen peroxide digestion. Unless otherwise indicated on this report, all required Quality Control samples have been determined to be in control prior to releasing these analytical results. Unless otherwise stated in this report, all samples were received in acceptable condition for analysis. Note: due to software limitations, the number of reported significant figures does not necessarily reflect the uncertainty of the analysis. If the amount of sample available for analysis is lower than advisable for this method, detection limits and uncertainty will be higher. This report must not be reproduced except in full, without the approval of Micro Analytical Laboratories, Inc., and pertains only to the samples analyzed as received. Unit explanations: mg = milligrams; kg = kilograms; ppm = parts per million. N/A = Not Applicable. RDL = Report Detection Limit.

MICRO ANALYTICAL LABORATORIES, INC.

LEAD IN PAINT - FLAME AAS (SW846)



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Gary Lowe
Forensic Analytical Consulting
21228 Cabot Boulevard
Hayward, CA 94545

PROJECT:
PROJECT NO. PJ63338
CLIENT'S NO. C26770
CONTRA COSTA COLLEGE
2600 MISSION BELL DRIVE
SAN PABLO, CA
BIOLOGICAL SCIENCE BUILDING

Micro Log In 281875
Total Samples 24
Date Sampled 05/24/2021
Date Received 06/02/2021
Date Analyzed 06/03/2021

Sample ID	Weight Percent	mg/kg (ppm)	RDL
Client: BIO-PB013 Lab: 281875-11 ROOM 3 BOILER ROOM NORTH SIDE GENERATOR BLUE METAL	< 0.0081 %	< 81	0.0081 % 81 mg/kg
Client: BIO-PB014 Lab: 281875-12 ROOM 3 BOILER ROOM SUPPORT POST PIPE YELLOW METAL	0.037 %	370	0.0079 % 79 mg/kg
Client: BIO-PB015 Lab: 281875-13 ROOM 3 BOILER ROOM SOUTH SIDE PIPE VALVE RED METAL	0.022 %	220	0.0076 % 76 mg/kg
Client: BIO-PB016 Lab: 281875-14 ROOM 3 BOILER ROOM FLOOR FLOOR GRAY CONCRETE	< 0.0081 %	< 81	0.0081 % 81 mg/kg
Client: BIO-PB017 Lab: 281875-15 ROOM 3 BOILER ROOM PANEL SOUTH WALL PANEL BLUE WOOD	< 0.0081 %	< 81	0.0081 % 81 mg/kg

Technical Supervisor: 

Long T. Nguyen, Chemistry Supervisor

6/3/2021

Date Reported

Analyst: KG

AIHA-LAP, LLC Accredited Laboratory ID #101768. Samples are analyzed by Flame Atomic Absorption Spectrometry (AAS) using SOP 23-Paint. This SOP is based on U.S. EPA SW-846 Method 7420 for instrumental analysis, and on ASTM E-1645-16 for nitric acid and hydrogen peroxide digestion. Unless otherwise indicated on this report, all required Quality Control samples have been determined to be in control prior to releasing these analytical results. Unless otherwise stated in this report, all samples were received in acceptable condition for analysis. Note: due to software limitations, the number of reported significant figures does not necessarily reflect the uncertainty of the analysis. If the amount of sample available for analysis is lower than advisable for this method, detection limits and uncertainty will be higher. This report must not be reproduced except in full, without the approval of Micro Analytical Laboratories, Inc., and pertains only to the samples analyzed as received. Unit explanations: mg = milligrams; kg = kilograms; ppm = parts per million. N/A = Not Applicable. RDL = Report Detection Limit.

MICRO ANALYTICAL LABORATORIES, INC.

LEAD IN PAINT - FLAME AAS (SW846)



1212

Gary Lowe

Forensic Analytical Consulting

21228 Cabot Boulevard

Hayward, CA 94545

PROJECT:

PROJECT NO. PJ63338

CLIENT'S NO. C26770

CONTRA COSTA COLLEGE

2600 MISSION BELL DRIVE

SAN PABLO, CA

BIOLOGICAL SCIENCE BUILDING

Micro Log In 281875

Total Samples 24

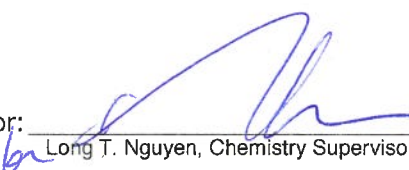
Date Sampled 05/24/2021

Date Received 06/02/2021

Date Analyzed 06/03/2021

Sample ID	Lead Concentration		RDL
	Weight Percent	mg/kg (ppm)	
Client: BIO-PB020 Lab: 281875-16 EXT SOUTH SIDE SOFFIT WHITE STUCCO	0.0073 %	73	0.0073 % 73 mg/kg
Client: BIO-PB021 Lab: 281875-17 EXT SOUTHWEST CORNER DUCT CHASE RED METAL	< 0.0079 %	< 79	0.0079 % 79 mg/kg
Client: BIO-PB022 Lab: 281875-18 EXT. WEST SIDE SHADE LOWER WHITE METAL	0.023 %	230	0.0080 % 80 mg/kg
Client: BIO-PB023 Lab: 281875-19 EXT. WEST SIDE WALL LOWER HEADER TRIM BEIGE METAL	2.9 %	29000	0.1900 % 1,900 mg/kg
Client: BIO-PB024 Lab: 281875-20 ROOF SOUTH WEST CORNER PARAPET CAP BROWN METAL	0.063 %	630	0.0076 % 76 mg/kg

Technical Supervisor:


 Long T. Nguyen, Chemistry Supervisor

6/3/2021

Date Reported

Analyst:

KG

AIHA-LAP, LLC Accredited Laboratory, ID #101768. Samples are analyzed by Flame Atomic Absorption Spectrometry (AAS) using SOP 23-Paint. This SOP is based on U.S. EPA SW-846 Method 7420 for instrumental analysis, and on ASTM E-1645-16 for nitric acid and hydrogen peroxide digestion. Unless otherwise indicated on this report, all required Quality Control samples have been determined to be in control prior to releasing these analytical results. Unless otherwise stated in this report, all samples were received in acceptable condition for analysis. Note: due to software limitations, the number of reported significant figures does not necessarily reflect the uncertainty of the analysis. If the amount of sample available for analysis is lower than advisable for this method, detection limits and uncertainty will be higher. This report must not be reproduced except in full, without the approval of Micro Analytical Laboratories, Inc., and pertains only to the samples analyzed as received. Unit explanations: mg = milligrams; kg = kilograms; ppm = parts per million. N/A = Not Applicable. RDL = Report Detection Limit.

MICRO ANALYTICAL LABORATORIES, INC.

LEAD IN PAINT - FLAME AAS (SW846)



1212

Gary Lowe

Forensic Analytical Consulting

21228 Cabot Boulevard

Hayward, CA 94545

PROJECT:

PROJECT NO. PJ63338

CLIENT'S NO. C26770

CONTRA COSTA COLLEGE

2600 MISSION BELL DRIVE

SAN PABLO, CA

BIOLOGICAL SCIENCE BUILDING

Micro Log In 281875

Total Samples 24

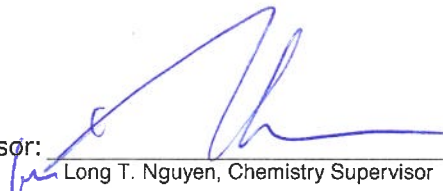
Date Sampled 05/24/2021

Date Received 06/02/2021

Date Analyzed 06/03/2021

Sample ID	Weight Percent	mg/kg (ppm)	RDL
Client: BIO-PB25 Lab: 281875-21 EXT. WEST SIDE I-BEAM COLUMN BLACK METAL	0.28 %	2800	0.0370 % 370 mg/kg
Client: BIO-PB026 Lab: 281875-22 EXT. WEST SIDE EAVE JOIST WHITE WOOD	0.082 %	820	0.0081 % 81 mg/kg
Client: BIO-PB026 Lab: 281875-23 EXT. SOUTH BOX RED WOOD	< 0.0081 %	< 81	0.0081 % 81 mg/kg
Client: BIO-PB29 Lab: 281875-24 ROOM 29 EXHAUST HOOD WHITE METAL	< 0.0081 %	< 81	0.0081 % 81 mg/kg

Technical Supervisor:


 Long T. Nguyen, Chemistry Supervisor

6/3/2021

Date Reported

Analyst:

KG

AIHA-LAP, LLC Accredited Laboratory, ID #101768. Samples are analyzed by Flame Atomic Absorption Spectrometry (AAS) using SOP 23-Paint. This SOP is based on U.S. EPA SW-846 Method 7420 for instrumental analysis, and on ASTM E-1645-16 for nitric acid and hydrogen peroxide digestion. Unless otherwise indicated on this report, all required Quality Control samples have been determined to be in control prior to releasing these analytical results. Unless otherwise stated in this report, all samples were received in acceptable condition for analysis. Note: due to software limitations, the number of reported significant figures does not necessarily reflect the uncertainty of the analysis. If the amount of sample available for analysis is lower than advisable for this method, detection limits and uncertainty will be higher. This report must not be reproduced except in full, without the approval of Micro Analytical Laboratories, Inc., and pertains only to the samples analyzed as received. Unit explanations: mg = milligrams; kg = kilograms; ppm = parts per million. N/A = Not Applicable. RDL = Report Detection Limit.

Paint Chip Sample Request Form

POD2886

Page 1 5

Client: HAY01

Site: Contra Costa College 2600 Mission Bell Drive
San Pablo, CA USA

Sampled By: M.A., JA

281875
PAINT

FACS: San Francisco, CA Office

Date: 05/24/21 - 05/28/21

Critical Solutions, Inc. (Biological Science Bldg) Client #: C26770

PM: Gary Bruce Lowe

Contact: Gary Bruce Lowe

Phone: 510-266-4600

Proj #: PJ63338

Turnaround Time: <12hr Same-D 1-Day 2-Day 3-Day **5-Day** Other Due Date & Time:

Analysis: **Flame AA (Pb)** Other

Email results to: FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com ~~malvarez@forensicanalytical.com~~

Sample #	Sample Location	Component	Color	Substrate	Condition
Bio-Pb001	RM 18, South east corner wall	wall	Orange	Drywall	G
Bio-Pb002	RM 24, South west corner, From 1x1" Ceramic tile counter	Counter top	Gray w/ Black specks	Ceramic tile	G
Bio-Pb003	RM 26, South east corner	wall	Beige	Drywall	G
-Pb004	RM 43, 4" x 4" wall tile	wall	Off-white	Ceramic	G
-Pb005	RM 12, South east wall	wall	Off-white	Drywall	G
-Pb006	RM 43 RM 43 / North East corner	wall	Off-white	plaster	G
-Pb007	RM 33 Center I Beam	I-Beam	Black	Metal	

Substrate: wood, metal, concrete, plaster, drywall, brick

Shipped via: FedEx Airborne UPS US Mail Courier Drop Off Other

Relinquished by: *[Signature]*
Date and Time: 05/31/21
Received by: *[Signature]*
Date and Time: 6/2/21 7:50A

Relinquished by:
Date and Time:
Received by:
Date and Time:

Relinquished by:
Date and Time:
Received by:
Date and Time:

Paint Chip Sample Request Form

PO02886

Page 2

5

Client: HAY01

Site: Contra Costa College 2600 Mission Bell Drive
San Pablo, CA USA

Sampled By: M.A., JA

281875
PAINT

FACS: San Francisco, CA Office

Date: 05/24/21 - 05/28/21

Critical Solutions, Inc.

Client #: C26770

PM: Gary Bruce Lowe

Contact: Gary Bruce Lowe

Phone: 510-266-4600

Proj #: PJ63338

Turnaround Time:

<12hr

Same-D

1-Day

2-Day

3-Day

5-Day

Other Due Date & Time:

Analysis:

Flame AA (Pb)

Other

Email results to:

FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com

Sample #	Sample Location	Component	Color	Substrate	Condition
Bio-Pb008	Corridor, RM 37 DOOR trim	Door Frame Trim	white	wood	G
Bio-Pb009	Corridor, South end/west wall	wall	light blue	drywall	G
Bio-Pb010	Corridor / South end / Door	Door	blue	wood	G
Bio-Pb011	RM 1 / South west / Adjectit ROOM for electrical	Beam	Off-white	↓	G
Bio-Pb012	RM 1 / South East wall	wall	Beige	drywall	G
Bio-Pb013	RM 3 (Boiler RM) / North Side	Generator	Blue	Metal	G
Bio-Pb014	RM 3 (Boiler RM) / Support Post	PIPE	Yellow	Metal	G

Substrate: wood, metal, concrete, plaster, drywall, brick

Shipped via:

FedEx

Airborne

UPS

US Mail

Courier

Drop Off

Other

Relinquished by:

Date and Time:

[Signature] 5/24/21
05/24/21

Relinquished by:

Date and Time:

Relinquished by:

Date and Time:

Received by:

Date and Time:

[Signature] 6/2/21
750A

Received by:

Date and Time:

Received by:

Date and Time:

Pair Chip Sample Request Form

POD2886

Page 3 3

Client: HAY01

Site: Contra Costa College 2600 Mission Bell Drive
San Pablo, CA USA

Sampled By: M.A. JA

281875
PAINT

FACS: San Francisco, CA Office

Date: 05/24/21 - 05/28/21

Critical Solutions, Inc.

Client #: C26770

PM: Gary Bruce Lowe

Contact: Gary Bruce Lowe

Phone: 510-266-4600

Proj #: PJ63338

Turnaround Time:	<12hr	Same-D	1-Day	2-Day	3-Day	5-Day	Other Due Date & Time:
Analysis:	Flame AA (Pb)	Other					
Email results to:	FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com						

Sample #	Sample Location	Component	Color	Substrate	Condition
B10-Pb015	RM 3 (Boiler RM) / South Side	pipe valve	Red	Metal	G
↓ -Pb016	RM 3 (Boiler RM) Floor	Floor	Gray	Concrete	P
-Pb017	RM 3 (Boiler RM) Panel, South	wall panel	blue	Wood	G
↓ -Pb018	Men's RR, 1"X1" tile	Floor	Gray	Ceramic	G
-Pb019	Roof	Exhaust Fwe	Gray	Metal	G
-Pb020	Ext. South Side	Soffit	White	Stucco	P
↓ -Pb021	Ext. S.W. Corner	DUCT CHASE	Red	Metal	

Substrate: wood, metal, concrete, plaster, drywall, brick

Shipped via:	FedEx	Airborne	UPS	US Mail	Courier	Drop Off	Other
Relinquished by: Date and Time:	[Signature] 5/21/21			Relinquished by: Date and Time:			Relinquished by: Date and Time:
Received by: Date and Time:	Kao Saito 6/2/21 750A			Received by: Date and Time:			Received by: Date and Time:

Paint Chip Sample Request Form

PO02986

Page 4 5

Client: HAY01

Site: Contra Costa College 2600 Mission Bell Drive
San Pablo, CA USA

Sampled By: M.A., JA

281875
PAINT

FACS: San Francisco, CA Office

Critical Solutions, Inc.

Client #: C26770

Date: 05/24/21 - 05/28/21

PM: Gary Bruce Lowe

Contact: Gary Bruce Lowe

Phone: 510-266-4600

Proj #: PJ63338

Turnaround Time:

<12hr

Same-D

1-Day

2-Day

3-Day

5-Day

Other Due Date & Time:

Analysis:

Flame AA (Pb)

Other

Email results to:

FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com

Sample #	Sample Location	Component	Color	Substrate	Condition
Bio - Pb022	Ext. West side	Wall Louver Shade	White	Metal	
-Pb023	Ext. West side	Wall Louver Header Trim	Berge	Metal	P
-Pb024	Roof South west corner	Parapet Cap	Brown	↓	
-Pb025	Ext. West side	I-BEAM (column)	Black	↓	
-Pb026	Ext. West side	Eave Joist	White	Wood	
-Pb027	Ext. South	Box	RED	↓	
Pb028	Int. void	Window sill	Brown	↓ JLA	X

18
19
20
21
22
23
X

Substrate: wood, metal, concrete, plaster, drywall, brick

Shipped via:

FedEx

Airborne

UPS

US Mail

Courier

Drop Off

Other

Relinquished by:

Date and Time:

5/31/21
06/02/21

Relinquished by:

Date and Time:

Relinquished by:

Date and Time:

Received by:

Date and Time:

Leo Sutter
6/2/21

Received by:

Date and Time:

Received by:

Date and Time:

Paint Chip Sample Request Form

PO02886

Page 5 5

Client: HAY01

Site: Contra Costa College 2600 Mission Bell Drive
San Pablo, CA USA

Sampled By: M.A & J.A.

281875
PAINT

FACS: San Francisco, CA Office

Critical Solutions, Inc.

Client #: C26770

Date: 05-24-21 - 05/28/21

PM: Gary Bruce Lowe

Contact: Gary Bruce Lowe

Phone: 510-266-4600

Proj #: PJ63338

Turnaround Time:

<12hr

Same-D

1-Day

2-Day

3-Day

5-Day

Other Due Date & Time:

Analysis:

Flame AA (Pb)

Other

Email results to:

FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com

Sample #	Sample Location	Component	Color	Substrate	Condition
Bio-Pb029	KM 29	Exhaust Hood	white	metal	G

24

Substrate: wood, metal, concrete, plaster, drywall, brick

Shipped via:

FedEx

Airborne

UPS

US Mail

Courier

Drop Off

Other

Relinquished by:

Date and Time:

[Signature]
5/27/21
06/02/21

Relinquished by:

Date and Time:

Relinquished by:

Date and Time:

Received by:

Date and Time:

[Signature]
6/2/2021 7:50am

Received by:

Date and Time:

Received by:

Date and Time:

MICRO ANALYTICAL LABORATORIES, INC.

EPA SW-846 LEAD-TTLC



1212
Gary Lowe
Forensic Analytical Consulting
21228 Cabot Boulevard
Hayward, CA 94545

PROJECT:

PROJECT NO. PJ63338
CLIENT'S NO. C26770
CONTRA COSTA COLLEGE
2600 MISSION BELL DRIVE
SAN PABLO, CA
BIOLOGICAL SCIENCE BUILDING

Micro Log In **281876**
Total Samples 4
Date Sampled 05/24/2021
Date Received 06/02/2021
Date Analyzed 06/02/2021

Sample ID	Lead Concentration, ppm	RDL, ppm	Comments
Client BIO-PB002 Micro 281876-01 ROOM 24 SOUTH WEST CORNER 1" X 1" CERAMIC TILE FROM COUNTER COUNTER TOP GRAY WITH BLACK SPECKS CERAMIC TILE	< 7.7	7.7	
Client BIO-PB004 Micro 281876-02 ROOM 43 4" X 4" WHITE TILE WALL OFF-WHITE CERAMIC	210	39	
Client BIO-PB18 Micro 281876-03 MEN'S RESTROOM 1" X 1" TILE FLOOR GRAY CERAMIC	< 8.9	8.9	
Client BIO-PB19 Micro 281876-04 ROOF EXHAUST FLUE GRAY METAL	180000	18000	

Technical Supervisor: Long T. Nguyen, Chemistry Supervisor 6/2/2021 Date Reported

Analyst: CZ

AIHA-LAP LLC ELLAP Accredited Laboratory, ID #101768. Samples are analyzed by Flame Atomic Absorption Spectrometry (FLAA) using SOP 23-Soil (in accordance with EPA Methods 3050B for Acid Digestion (SW 846, 3rd edition, 2007) and 7420 for Analysis (SW-846, 3rd edition, 2007)). NOTE: Water samples are analyzed by FLAA in accordance with Method 3111B (Standard Methods for the Examination of Water and Wastewater, 18th edition). Unless otherwise indicated on this report, all required Quality Control samples have been determined to be in control prior to releasing these analytical results. Unless otherwise stated in this report, all samples were received in acceptable condition for analysis. Note: due to software limitations, the number of reported significant figures does not necessarily reflect the uncertainty of the analysis. This report must not be reproduced except in full without the approval of Micro Analytical Laboratories, Inc., and pertains only to the samples analyzed as received. Unit explanations: mg = milligrams; kg = kilograms; ppm = parts per million. TTLC = TOTAL THRESHOLD LIMIT CONCENTRATION. L = liters. RDL = Report Detection Limit. Note: mg / Kg is the same as ppm for solids, and mg/L is the same as ppm for water.

5900 HOLLIS STREET, SUITE M, EMERYVILLE, CALIFORNIA 94608 - (510) 653-0824

Pair Chip Sample Request Form

POD 2886

Page 1

5
281876
TLC

Client: HAY01

Site: Contra Costa College 2600 Mission Bell Drive
San Pablo, CA USA

Sampled By: M.A., JA

FACS: San Francisco, CA Office

Date: 05/24/21 - 05/28/21

Critical Solutions, Inc.

(Biological Science) Bldg

Client #: C26770

PM: Gary Bruce Lowe

Contact: Gary Bruce Lowe

Phone: 510-266-4600

Proj #: PJ63338

Turnaround Time: <12hr Same-D 1-Day 2-Day 3-Day **5-Day** Other Due Date & Time:

Analysis: **Flame AA (Pb)** Other

Email results to: FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com ~~malvarez@forensicanalytical.com~~

Sample #	Sample Location	Component	Color	Substrate	Condition
Bio-Pb001	RM 18, South east corner wall	wall	Orange	Drywall	G
Bio-Pb002	RM 24, South west corner, From 1'x1" ceramic tile counter	Counter top	Gray w/ Black specks	Ceramic tile	G (1)
Bio-Pb003	RM 26, south east corner	wall	Beige	Drywall	G
-Pb004	RM 43, 4" x 4" wall tile	wall	Offwhite	Ceramic	G (2)
-Pb005	RM 12, South east wall	wall	Off-white	Drywall	G
-Pb006	Man ^o RM 43 / North East corner	wall	Off-white	plaster	G
-Pb007	RM 33 Center I Beam	I-Beam	Black	Metal	

Substrate: wood, metal, concrete, plaster, drywall, brick

Shipped via: FedEx Airborne UPS US Mail Courier Drop Off Other

Relinquished by: [Signature] Date and Time: 05/31/21 06/02/21

Received by: [Signature] Date and Time: 6/2/21 7:50A

Pair Chip Sample Request Form

POD2886

Page 3

5

Client: HAY01

Site: Contra Costa College 2600 Mission Bell Drive
San Pablo, CA USA

Sampled By: M.A. JA

FACS: San Francisco, CA Office

Date: 05/24/21 - 05/28/21

281876
TTL

Critical Solutions, Inc.

Client #: C26770

PM: Gary Bruce Lowe

Contact: Gary Bruce Lowe

Phone: 510-266-4600

Proj #: PJ63338

Turnaround Time:	<12hr	Same-D	1-Day	2-Day	3-Day	5-Day	Other Due Date & Time:
Analysis:	Flame AA (Pb)	Other					
Email results to:	FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com						

Sample #	Sample Location	Component	Color	Substrate	Condition
Bio-Pb015	RM 3 (Boiler RM) / South Side	Pipe valve	Red	Metal	G
↓ -Pb016	RM 3 (Boiler RM) Floor	Floor	Gray	Concrete	P
-Pb017	RM 3 (Boiler RM) Panel, South	wall panel	blue	Wood	G
↓ -Pb018	Men's RR, 1"X1" tile	Floor	Gray	Ceramic	G (3)
-Pb019	Roof	Exhaust Fwe	Gray	metal	G (4)
-Pb020	Ext. South Side	Soffit	White	Stucco	P
↓ -Pb021	Ext. S.W. Corner	DUCT CHASE	Red	metal	

Substrate: wood, metal, concrete, plaster, drywall, brick

Shipped via:	FedEx	Airborne	UPS	US Mail	Courier	Drop Off	Other
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Relinquished by: <i>[Signature]</i> Date and Time: 5/24/21	Relinquished by: Date and Time:	Relinquished by: Date and Time:
Received by: <i>Kaw Saito</i> Date and Time: 6/2/21 750A	Received by: Date and Time:	Received by: Date and Time:

Metals Analysis of Paints

(AIHA-LAP, LLC Accreditation, Lab ID #101762)

Forensic Analytical Consulting Svcs
Gary Lowe
21228 Cabot Blvd.

Hayward, CA 94545

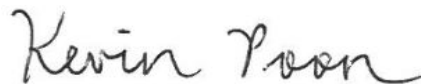
Client ID: HAY01
Report Number: M234202
Date Received: 05/28/21
Date Analyzed: 06/07/21
Date Printed: 06/07/21
First Reported: 06/07/21

Job ID / Site: PJ63338; Critical Solutions, Inc.
Date(s) Collected: 05/28/21

SGSFL Job ID: HAY01
Total Samples Submitted: 2
Total Samples Analyzed: 2

Sample Number	Lab Number	Analyte	Result	Result Units	Reporting Limit*	Method Reference
CSB-PB-101	30889311	Pb	< 0.007	wt%	0.007	EPA 3050B/7000B
CSB-PB-102	30889312	Pb	< 0.007	wt%	0.007	EPA 3050B/7000B

* The Reporting Limit represents the lowest amount of analyte that the laboratory can confidently detect in the sample, and is not a regulatory level. The Units for the Reporting Limit are the same as the Units for the Final Results.



Kevin Poon, Laboratory Analyst, Hayward Laboratory

Analytical results and reports are generated by SGS Forensic Laboratories at the request of and for the exclusive use of the person or entity (client) named on such report. Results, reports or copies of same will not be released by SGS Forensic Laboratories to any third party without prior written request from client. This report applies only to the sample(s) tested. Supporting laboratory documentation is available upon request. This report must not be reproduced except in full, unless approved by SGS Forensic Laboratories. The client is solely responsible for the use and interpretation of test results and reports requested from SGS Forensic Laboratories. SGS Forensic Laboratories is not able to assess the degree of hazard resulting from materials analyzed. SGS Forensic Laboratories reserves the right to dispose of all samples after a period of thirty (30) days, according to all state and federal guidelines, unless otherwise specified. Any modifications that have been made to referenced test methods are documented in SGS Forensic Laboratories' Standard Operating Procedures Manual. Sample results have not been blank corrected. Quality control and sample receipt condition were acceptable unless otherwise noted.

Note* Sampling data used in this report was provided by the client as noted on the associated chain of custody form.

Metals Analysis of Paints

(AIHA-LAP, LLC Accreditation, Lab ID #101762)

Forensic Analytical Consulting Svcs
Gary Lowe
21228 Cabot Blvd.

Hayward, CA 94545

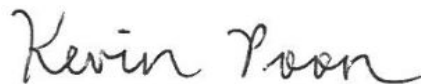
Client ID: HAY01
Report Number: M234203
Date Received: 05/28/21
Date Analyzed: 06/07/21
Date Printed: 06/07/21
First Reported: 06/07/21

Job ID / Site: PJ63338; Critical Solutions, Inc.
Date(s) Collected: 05/28/21

SGSFL Job ID: HAY01
Total Samples Submitted: 1
Total Samples Analyzed: 1

Sample Number	Lab Number	Analyte	Result	Result Units	Reporting Limit*	Method Reference
CE-PB-101	30889313	Pb	0.88	wt%	0.07	EPA 3050B/7000B

* The Reporting Limit represents the lowest amount of analyte that the laboratory can confidently detect in the sample, and is not a regulatory level. The Units for the Reporting Limit are the same as the Units for the Final Results.



Kevin Poon, Laboratory Analyst, Hayward Laboratory

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Note* Sampling data used in this report was provided by the client as noted on the associated chain of custody form.

Pair Chip Sample Request Form

Client: HAY01

Site: Contra Costa College 2600 Mission Bell Drive
San Pablo, CA USA

Sampled By: Redzinski

FACS: San Francisco, CA Office

Date: 28 May 2021

Critical Solutions, Inc.

Client #: C26770

PM: Gary Bruce Lowe

Contact: Gary Bruce Lowe

Phone: 510-266-4600

Proj #: PJ63338

Turnaround Time:	<12hr	Same-D	1-Day	2-Day	3-Day	5-Day	Other Due Date & Time:
Analysis:	Flame AA (Pb)	Other					
Email results to:	FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com						

Sample #	Sample Location	Component	Color	Substrate	Condition
CE-Pb-10)	Chiller component near entry	chiller component, near entry	grey	metal	good
/					

Substrate: wood, metal, concrete, plaster, drywall, brick

Shipped via:	FedEx	Airborne	UPS	US Mail	Courier	Drop Off	Other
Relinquished by: Redzinski	Relinquished by:			Relinquished by:			
Date and Time: 28 May 2021 / 1515	Date and Time:			Date and Time:			
Received by:	Received by:			Received by:			
Date and Time:	Date and Time:			Date and Time:			



Metals Analysis of Paints

(AIHA-LAP, LLC Accreditation, Lab ID #101762)

Forensic Analytical Consulting Svcs
Gary Lowe
21228 Cabot Blvd.

Hayward, CA 94545

Client ID: HAY01
Report Number: M234278
Date Received: 06/03/21
Date Analyzed: 06/10/21
Date Printed: 06/10/21
First Reported: 06/10/21

Job ID / Site: PJ63338; Critical Solutions, Inc.
Date(s) Collected: 5/25/21

SGSFL Job ID: HAY01
Total Samples Submitted: 27
Total Samples Analyzed: 27

Sample Number	Lab Number	Analyte	Result	Result Units	Reporting Limit*	Method Reference
PSBS-PB01	30889501	Pb	< 0.006	wt%	0.006	EPA 3050B/7000B
PSBS-PB02	30889502	Pb	0.96	wt%	0.06	EPA 3050B/7000B
PSBS-PB03	30889503	Pb	0.10	wt%	0.007	EPA 3050B/7000B
PSBS-PB04	30889504	Pb	1.9	wt%	0.2	EPA 3050B/7000B
PSBS-PB05	30889505	Pb	0.11	wt%	0.006	EPA 3050B/7000B
PSBS-PB06	30889506	Pb	0.38	wt%	0.04	EPA 3050B/7000B
PSBS-PB07	30889507	Pb	0.32	wt%	0.02	EPA 3050B/7000B
PSBS-PB08	30889508	Pb	0.26	wt%	0.02	EPA 3050B/7000B
PSBS-PB09	30889509	Pb	0.012	wt%	0.007	EPA 3050B/7000B
PSBS-PB10	30889510	Pb	0.029	wt%	0.006	EPA 3050B/7000B
PSBS-PB11	30889511	Pb	0.039	wt%	0.006	EPA 3050B/7000B
PSBS-PB12	30889512	Pb	0.32	wt%	0.02	EPA 3050B/7000B
PSBS-PB13	30889513	Pb	5.5	wt%	0.4	EPA 3050B/7000B
PSBS-PB14	30889514	Pb	0.090	wt%	0.006	EPA 3050B/7000B
PSBS-PB15	30889515	Pb	0.57	wt%	0.03	EPA 3050B/7000B
PSBS-PB16	30889516	Pb	0.97	wt%	0.06	EPA 3050B/7000B
PSBS-PB17	30889517	Pb	0.29	wt%	0.02	EPA 3050B/7000B
PSBS-PB18	30889518	Pb	0.013	wt%	0.006	EPA 3050B/7000B
PSBS-PB18	30889519	Pb	0.34	wt%	0.02	EPA 3050B/7000B
PSBS-PB20	30889520	Pb	0.11	wt%	0.006	EPA 3050B/7000B
PSBS-PB21	30889521	Pb	8.5	wt%	0.6	EPA 3050B/7000B
PSBS-PB22	30889522	Pb	0.47	wt%	0.06	EPA 3050B/7000B
PSBS-PB23	30889523	Pb	0.020	wt%	0.006	EPA 3050B/7000B
PSBS-PB24	30889524	Pb	3.2	wt%	0.3	EPA 3050B/7000B
PSBS-PB25	30889525	Pb	0.19	wt%	0.02	EPA 3050B/7000B
PSBS-PB26	30889526	Pb	2.5	wt%	0.2	EPA 3050B/7000B
PSBS-PB27	30889527	Pb	0.008	wt%	0.006	EPA 3050B/7000B

Metals Analysis of Paints

(AIHA-LAP, LLC Accreditation, Lab ID #101762)

Forensic Analytical Consulting Svcs
Gary Lowe
21228 Cabot Blvd.

Hayward, CA 94545

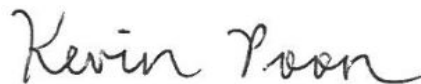
Client ID: HAY01
Report Number: M234278
Date Received: 06/03/21
Date Analyzed: 06/10/21
Date Printed: 06/10/21
First Reported: 06/10/21

Job ID / Site: PJ63338; Critical Solutions, Inc.
Date(s) Collected: 5/25/21

SGSFL Job ID: HAY01
Total Samples Submitted: 27
Total Samples Analyzed: 27

Sample Number	Lab Number	Analyte	Result	Result Units	Reporting Limit*	Method Reference
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* The Reporting Limit represents the lowest amount of analyte that the laboratory can confidently detect in the sample, and is not a regulatory level. The Units for the Reporting Limit are the same as the Units for the Final Results.



Kevin Poon, Laboratory Analyst, Hayward Laboratory

Analytical results and reports are generated by SGS Forensic Laboratories at the request of and for the exclusive use of the person or entity (client) named on such report. Results, reports or copies of same will not be released by SGS Forensic Laboratories to any third party without prior written request from client. This report applies only to the sample(s) tested. Supporting laboratory documentation is available upon request. This report must not be reproduced except in full, unless approved by SGS Forensic Laboratories. The client is solely responsible for the use and interpretation of test results and reports requested from SGS Forensic Laboratories. SGS Forensic Laboratories is not able to assess the degree of hazard resulting from materials analyzed. SGS Forensic Laboratories reserves the right to dispose of all samples after a period of thirty (30) days, according to all state and federal guidelines, unless otherwise specified. Any modifications that have been made to referenced test methods are documented in SGS Forensic Laboratories' Standard Operating Procedures Manual. Sample results have not been blank corrected. Quality control and sample receipt condition were acceptable unless otherwise noted.

Note* Sampling data used in this report was provided by the client as noted on the associated chain of custody form.

Pain Chip Sample Request Form

Client: HAY01

Site: Contra Costa College 2600 Mission Bell Drive
San Pablo, CA USA

Sampled By: AA & JA

FACS: San Francisco, CA Office

Date: 5/25/21

Critical Solutions, Inc.

Client #: C26770

PM: Gary Bruce Lowe

Contact: Gary Bruce Lowe

Phone: 510-266-4600

Proj #: PJ63338

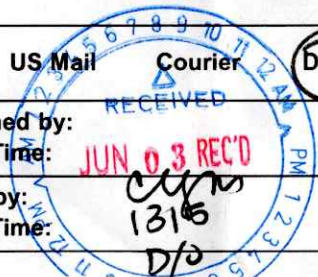
Turnaround Time:	<12hr	Same-D	1-Day	2-Day	3-Day	5-Day	Other Due Date & Time:
Analysis:	Flame AA (Pb)		Other				
Email results to:	FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com						

Sample #	PSB South	Sample Location	Component	Color	Substrate	Condition
PSBS - Pb001	PSB South	Corridor / South wall / North wall	JLA Plaster wall	Baby Blue	Plaster	I
Pb002		RM PS-8 / West wall	Wall	Light orange	Plaster	I
- Pb003		RM PS-17 / West wall	Wall	off white	Plaster	G
- Pb004		RM PS-12 / South wall	Wall	Orange	Plaster	G
- Pb005		RM PS-19 / North wall	Wall	Dark Blue	Drywall	G
- Pb006		RM PS-5 / North wall	Door Wall Frame	Brown	Metal	I
✓ - Pb007		RM PS-5 / North	Door Frame	Baby Blue	metal	I

Substrate: wood, metal, concrete, plaster, drywall, brick

Shipped via: FedEx Airborne UPS US Mail Courier **Drop Off** Other

Relinquished by: Radziński Date and Time: 23 June 2021 / 1310	Relinquished by: Date and Time: JUN 03 REC'D 1316 D/O	Relinquished by: Date and Time:
Received by: Date and Time:	Received by: Date and Time:	Received by: Date and Time:



Pain Chip Sample Request Form

Client: HAY01

Site: Contra Costa College 2600 Mission Bell Drive
San Pablo, CA USA

Sampled By: AA & JA

FACS: San Francisco, CA Office

Date: 5/25/21

Critical Solutions, Inc.

Client #: C26770

PM: Gary Bruce Lowe

Contact: Gary Bruce Lowe

Phone: 510-266-4600

Proj #: PJ63338

Turnaround Time:

<12hr Same-D 1-Day 2-Day 3-Day **5-Day** Other Due Date & Time:

Analysis:

Flame AA (Pb) Other

Email results to:

FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com

Sample #	Sample Location	Component	Color	Substrate	Condition
PSBS-Pb008	PSB South / RM PS-2 / North wall	Wall	Brown	Plaster	P
Pb009	/ RM PS-1a / North west	Wall	Black	Glass	F
-Pb010	/ RM PS-5 / South west	Duct	Red	Metal	G
-Pb011	/ RM PS-2 / East wall	Duct	off white	Metal	G
-Pb012	/ RM PS-1 / South wall	Wall	off white	Drywall	G
-Pb013	/ RM PS-5 / North wall	Window frame	Green	Metal Wood AA	I
↓ -Pb014	↓ / RM PS-5 / North wall	Wall	Green	Wood	↓

Substrate: wood, metal, concrete, plaster, drywall, brick

Shipped via:

FedEx Airborne UPS US Mail **Overnight** Drop Off Other

Relinquished by: Radzinski
Date and Time: 03 June 2021 / 1310

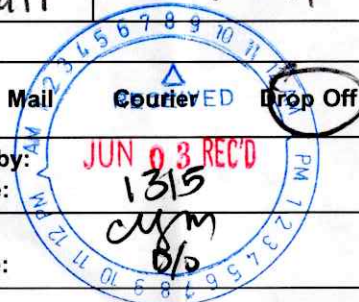
Relinquished by: JUN 03 REC'D
Date and Time: 1315
cjm
o/b

Relinquished by:
Date and Time:

Received by:
Date and Time:

Received by:
Date and Time:

Received by:
Date and Time:



Pair Chip Sample Request Form

Client: HAY01 **Site:** Contra Costa College 2600 Mission Bell Drive San Pablo, CA USA **Sampled By:** AA & JA
FACS: San Francisco, CA Office **Date:** 5/25/21
 Critical Solutions, Inc. **Client #:** C26770 **PM:** Gary Bruce Lowe
Contact: Gary Bruce Lowe **Phone:** 510-266-4600 **Proj #:** PJ63338

Turnaround Time: <12hr Same-D 1-Day 2-Day 3-Day 5-Day Other Due Date & Time:

Analysis: Flame AA (Pb) Other

Email results to: FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com

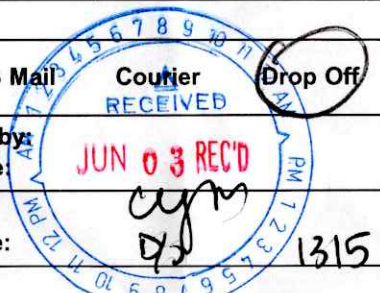
Sample #	Sample Location	Component	Color	Substrate	Condition
PSBS-Pb015	PSB South / RM PS-6 / North wall	Base board	Baby blue	Wood	I
- Pb016	/ RM PS-8 / North wall	Baseboard	Brown	Wood	I
- Pb017	/ RM PS-10 / South wall	Baseboard	off white	Wood	I
- Pb018	/ RM PS-6 / Cabinet	Cabinet	Light Brown	Wood	I
- Pb019	/ Rm PS19 / RM-108	Door frame	Dark blue	Metal	I
- Pb020	/ - VOID -	Duct	off white	Metal	AA
↓ - Pb020	↓ / Rm PS-19 / RM-108	Door	Black	Metal	I

Substrate: wood, metal, concrete, plaster, drywall, brick

Shipped via: FedEx Airborne UPS US Mail Carrier Drop Off Other

Relinquished by: Redzinski **Relinquished by:** **Relinquished by:**
Date and Time: 05/20/21 June 1/1310 **Date and Time:** **Date and Time:**

Received by: **Received by:** **Received by:**
Date and Time: **Date and Time:** **Date and Time:**



Pain Chip Sample Request Form

Client: HAY01

Site: Contra Costa College 2600 Mission Bell Drive
San Pablo, CA USA

Sampled By: AA & JA

FACS: San Francisco, CA Office

Date: 5/25/21

Critical Solutions, Inc.

Client #: C26770

PM: Gary Bruce Lowe

Contact: Gary Bruce Lowe

Phone: 510-266-4600

Proj #: PJ63338

Turnaround Time:

<12hr Same-D 1-Day 2-Day 3-Day **5-Day**

Other Due Date & Time:

Analysis:

Flame AA (Pb) Other

Email results to:

FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com

Sample #	Sample Location	Component	Color	Substrate	Condition
PSBS - Pb21	PSB South / RM - PS-5 North on Hood	HVAC unit	Orange	Metal	I
-Pb22	↓ / RM PS=6 South side	Exhaust hood	Light Orange	Transite	↓
-Pb23	↓ / RM - PS-14 South wall	Exhaust hood	Dark blue	Transite	↓
-Pb24	↓ / RM PS-6 South wall	Post	Dark Brown	Metal	↓
AA		AA			
AA					
AA					

Substrate: wood, metal, concrete, plaster, drywall, brick

Shipped via:

FedEx Airborne UPS US Mail **Courier** Drop Off Other

Relinquished by: Radzinski
Date and Time: 03 June 2021 / 1310

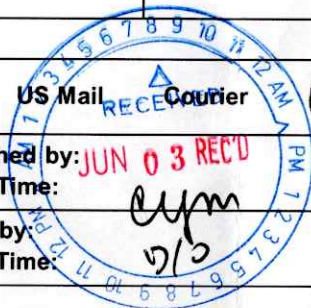
Relinquished by: JUN 03 REC'D
Date and Time: [Signature]

Relinquished by:
Date and Time:

Received by:
Date and Time:

Received by: [Signature]
Date and Time:

Received by:
Date and Time:



Pair Chip Sample Request Form

Client: HAY01

Site: Contra Costa College 2600 Mission Bell Drive
San Pablo, CA USA

Sampled By: AA/SS

FACS: San Francisco, CA Office

Date: 05/28/21

Critical Solutions, Inc.

Client #: C26770

PM: Gary Bruce Lowe

Contact: Gary Bruce Lowe

Phone: 510-266-4600

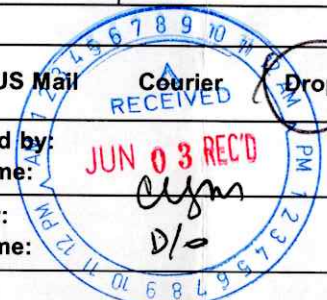
Proj #: PJ63338

Turnaround Time:	<12hr	Same-D	1-Day	2-Day	3-Day	<u>5-Day</u>	Other Due Date & Time:
Analysis:	<u>Flame AA (Pb)</u>	Other					
Email results to:	FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com						

Sample #	Sample Location	Component	Color	Substrate	Condition
PSBS - PB 25	PSB / Southeast area SOUTH EXTERIOR	Wall	White	Stucco	I
PB 26	North center area	Door	Brown	Metal	
PB 27	East center area	Post	Blue	Metal	∩
AA					

Substrate: wood, metal, concrete, plaster, drywall, brick

Shipped via:	FedEx	Airborne	UPS	US Mail	Courier	<u>Drop Off</u>	Other
Relinquished by: Rudzinski	Relinquished by: [Signature]			Relinquished by:			
Date and Time: 03 June 2021 / 12:30	Date and Time: JUN 03 REC'D [Signature]			Date and Time:			
Received by:	Received by: [Signature]			Received by:			
Date and Time:	Date and Time: [Signature]			Date and Time:			



Metals Analysis of Paints

(AIHA-LAP, LLC Accreditation, Lab ID #101762)

Forensic Analytical Consulting Svcs
Gary Lowe
21228 Cabot Blvd.

Hayward, CA 94545

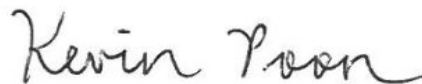
Client ID: HAY01
Report Number: M234279
Date Received: 06/03/21
Date Analyzed: 06/10/21
Date Printed: 06/10/21
First Reported: 06/10/21

Job ID / Site: PJ63338; Critical Solutions, Inc.
Date(s) Collected: 6/3/21

SGSFL Job ID: HAY01
Total Samples Submitted: 12
Total Samples Analyzed: 12

Sample Number	Lab Number	Analyte	Result	Result Units	Reporting Limit*	Method Reference
BR-01-P	30889528	Pb	0.11	wt%	0.007	EPA 3050B/7000B
BR-02-P	30889529	Pb	< 0.006	wt%	0.006	EPA 3050B/7000B
BR-03-P	30889530	Pb	1.4	wt%	0.07	EPA 3050B/7000B
BR-04-P	30889531	Pb	1.2	wt%	0.07	EPA 3050B/7000B
BR-05-P	30889532	Pb	< 0.007	wt%	0.007	EPA 3050B/7000B
BR-06-P	30889533	Pb	0.078	wt%	0.007	EPA 3050B/7000B
BR-07-P	30889534	Pb	0.019	wt%	0.007	EPA 3050B/7000B
BR-08-P	30889535	Pb	0.18	wt%	0.02	EPA 3050B/7000B
BR-09-P	30889536	Pb	1.4	wt%	0.2	EPA 3050B/7000B
BR-10-P	30889537	Pb	< 0.007	wt%	0.007	EPA 3050B/7000B
BR-11-P	30889538	Pb	0.007	wt%	0.006	EPA 3050B/7000B
BR-12-P	30889539	Pb	0.19	wt%	0.02	EPA 3050B/7000B

* The Reporting Limit represents the lowest amount of analyte that the laboratory can confidently detect in the sample, and is not a regulatory level. The Units for the Reporting Limit are the same as the Units for the Final Results.



Kevin Poon, Laboratory Analyst, Hayward Laboratory

Analytical results and reports are generated by SGS Forensic Laboratories at the request of and for the exclusive use of the person or entity (client) named on such report. Results, reports or copies of same will not be released by SGS Forensic Laboratories to any third party without prior written request from client. This report applies only to the sample(s) tested. Supporting laboratory documentation is available upon request. This report must not be reproduced except in full, unless approved by SGS Forensic Laboratories. The client is solely responsible for the use and interpretation of test results and reports requested from SGS Forensic Laboratories. SGS Forensic Laboratories is not able to assess the degree of hazard resulting from materials analyzed. SGS Forensic Laboratories reserves the right to dispose of all samples after a period of thirty (30) days, according to all state and federal guidelines, unless otherwise specified. Any modifications that have been made to referenced test methods are documented in SGS Forensic Laboratories' Standard Operating Procedures Manual. Sample results have not been blank corrected. Quality control and sample receipt condition were acceptable unless otherwise noted.

Note* Sampling data used in this report was provided by the client as noted on the associated chain of custody form.

Sampling Data Form / Chain of custody

Client: HAY01
FACS: San Francisco, CA Office
 Critical Solutions, Inc.

Site: Contra Costa College 2600 Mission Bell Drive San Pablo, CA USA

Sampled By: Sevilla / Radzinski
Sample Date: 03 June 2021
Proj #: PJ63338

Turnaround Time:	RUSH 24hr 48hr Extended (<u>5</u> days)
Analysis:	_____ PLM Standard: _____ PLM w/ Point Count: (_____ 400pt. _____ 1,000 pt.): X : FLAME AA
Email results to:	FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com

HA#	Homogeneous Material Description	Quant. in SF	Friable/Cat I/Cat II	Condition	Sample #	Sample Location	Lab result
05	Paint, pink	wall	pink	G	BR-01-P	int, W. wall, v center	concrete metal
07	Paint	Transformer	blue	G	BR-02-P	int, transformer stand SW corner	metal
01	PAINT, BRICK RED	DOOR	BRICK RED	G	BR-03-P	BOILER ROOM / ENTRY DOOR / SW AREA	METAL
02	PAINT, BRICK RED #2	PIPE	BRICK RED	G	BR-04-P	↓ / EXT / SW CORNER / PIPE	METAL
03	PAINT, FIRE RED	CONTROL PANEL	FIRE RED	G	BR-05-P	BOILER ROOM / INT. / S. WALL / CONTROL PANEL	METAL
04	PAINT, FERRARI RED	PIPE FLANGE / CAPS	FERRARI RED	G	BR-06-P	↓ / INT. / N.W. CORNER / PIPE FLANGE	METAL
06	PAINT, YELLOW	PIPES / FLANGES	YELLOW	G	BR-07-P	↓ / ↓ / W. WALL / PIPE ADS TO ENTRY	METAL
08	PAINT, BLUE	TSI	BLUE	G	BR-08-P	↓ / INT / SE AREA / TSI ON PIPE	

DW = Drywall, JC = Joint Compound, WT=Wall Texture, VFT = Vinyl Floor Tile, VSF = Vinyl Sheet Flooring, BB = Baseboard, BBM = Baseboard Mastic, CM = Carpet Mastic, ACT = Acoustic Ceiling Tile, ACS = Sprayed-on Acoustic Ceiling Material, FP = Fireproofing, PI = Pipe Insulation, PFI = Pipe fitting insulation, WP = Plaster, CP = Ceiling Plaster, ES = Exterior Stucco

Relinquished by: <u>Radzinski</u> Date and Time: <u>03 June 2021 / 1310</u>	Relinquished by: Date and Time:	Relinquished by: Date and Time:
Received by: Date and Time:	Received by: Date and Time:	Received by: Date and Time:



Sampling Data Form / Chain of custody

Client: HAY01
FACS: San Francisco, CA Office
 Critical Solutions, Inc.

Site: Contra Costa College 2600 Mission Bell Drive San Pablo, CA USA

Sampled By: SEVILLA / RADZINSKI
Sample Date: 06/03/21
Proj #: PJ63338

Turnaround Time:	RUSH 24hr 48hr Extended (<u>5</u> days)
Analysis:	_____ PLM Standard: _____ PLM w/ Point Count: (_____ 400pt. _____ 1,000 pt.): x : FLAME AA
Email results to:	FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com

HA#	Homogeneous Material Description	COMPONENT COLOR		Condition	Sample #	Sample Location	Lab result
		Quant. in SF	Eriable/Cat L/Cat.H.				
09	PAINT, BLUE	DOOR FRAME	BLUE	G	BR-09-P	BOILER ROOM / INT / NE ENTRY / DOOR FRAME	
10	PAINT, GRAY / BLUE	FLOOR	GRAY / BLUE	P	BR-10-P	↓ / ↓ / SW AREA ADJ TO ENTRY	
11	PAINT, GRAY	PIPE	GRAY	F	BR-11-P	↓ / EXT / NE AREA / GAS METER	
12	PAINT, GRAY	PEDESTAL	GRAY	F	BR-12-P	↓ / INT / NE AREA / PEDESTAL	

DW = Drywall, JC = Joint Compound, WT=Wall Texture, VFT = Vinyl Floor Tile, VSF = Vinyl Sheet Flooring, BB = Baseboard, BBM = Baseboard Mastic, CM = Carpet Mastic, ACT = Acoustic Ceiling Tile, ACS = Sprayed-on Acoustic Ceiling Material, FP = Fireproofing, PI = Pipe Insulation, PFI = Pipe fitting insulation, WP = Plaster, CP = Ceiling Plaster, ES = Exterior Stucco

Relinquished by: Radzinski Date and Time: 03 June 2021 / 12:10	Relinquished by: Date and Time:	Relinquished by: Date and Time:
Received by: Date and Time:	Received by: Date and Time:	Received by: Date and Time:



Metals Analysis of Paints

(AIHA-LAP, LLC Accreditation, Lab ID #101762)

Forensic Analytical Consulting Svcs
Gary Lowe
21228 Cabot Blvd.

Hayward, CA 94545

Client ID: HAY01
Report Number: M234287
Date Received: 06/03/21
Date Analyzed: 06/11/21
Date Printed: 06/11/21
First Reported: 06/11/21

Job ID / Site: PJ63338; Critical Solutions, Inc.
Date(s) Collected: 05/26/21

SGSFL Job ID: HAY01
Total Samples Submitted: 25
Total Samples Analyzed: 25

Sample Number	Lab Number	Analyte	Result	Result Units	Reporting Limit*	Method Reference
PSBN-PB001	30889562	Pb	< 0.007	wt%	0.007	EPA 3050B/7000B
PSBN-PB002	30889563	Pb	< 0.006	wt%	0.006	EPA 3050B/7000B
PSBN-PB004	30889564	Pb	< 0.006	wt%	0.006	EPA 3050B/7000B
PSBN-PB005	30889565	Pb	0.089	wt%	0.006	EPA 3050B/7000B
PSBN-PB007	30889567	Pb	0.032	wt%	0.007	EPA 3050B/7000B
PSBN-PB008	30889568	Pb	< 0.007	wt%	0.007	EPA 3050B/7000B
PSBN-PB009	30889569	Pb	0.32	wt%	0.02	EPA 3050B/7000B
PSBN-PB010	30889570	Pb	0.032	wt%	0.007	EPA 3050B/7000B
PSBN-PB011	30889571	Pb	< 0.006	wt%	0.006	EPA 3050B/7000B
PSBN-PB012	30889572	Pb	< 0.006	wt%	0.006	EPA 3050B/7000B
PSBN-PB013	30889573	Pb	1.9	wt%	0.2	EPA 3050B/7000B
PSBN-PB014	30889574	Pb	< 0.006	wt%	0.006	EPA 3050B/7000B
PSBN-PB015	30889575	Pb	0.20	wt%	0.02	EPA 3050B/7000B
PSBN-PB016	30889576	Pb	< 0.007	wt%	0.007	EPA 3050B/7000B
PSBN-PB017	30889577	Pb	< 0.006	wt%	0.006	EPA 3050B/7000B
PSBN-PB019	30889579	Pb	0.008	wt%	0.007	EPA 3050B/7000B
PSBN-PB020	30889580	Pb	0.034	wt%	0.006	EPA 3050B/7000B
PSBN-PB021	30889581	Pb	< 0.006	wt%	0.006	EPA 3050B/7000B
PSBN-PB022	30889582	Pb	0.028	wt%	0.007	EPA 3050B/7000B
PSBN-PB023	30889583	Pb	< 0.007	wt%	0.007	EPA 3050B/7000B
PSBN-PB024	30889584	Pb	< 0.007	wt%	0.007	EPA 3050B/7000B
PSBN-PB025	30889585	Pb	< 0.006	wt%	0.006	EPA 3050B/7000B
PSBN-PB026	30889586	Pb	< 0.007	wt%	0.007	EPA 3050B/7000B
PSBN-PB027	30889587	Pb	0.12	wt%	0.007	EPA 3050B/7000B
PSBN-PB028	30889588	Pb	0.018	wt%	0.007	EPA 3050B/7000B

Metals Analysis of Paints

(AIHA-LAP, LLC Accreditation, Lab ID #101762)

Forensic Analytical Consulting Svcs
Gary Lowe
21228 Cabot Blvd.

Hayward, CA 94545

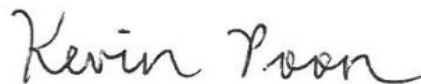
Client ID: HAY01
Report Number: M234287
Date Received: 06/03/21
Date Analyzed: 06/11/21
Date Printed: 06/11/21
First Reported: 06/11/21

Job ID / Site: PJ63338; Critical Solutions, Inc.
Date(s) Collected: 05/26/21

SGSFL Job ID: HAY01
Total Samples Submitted: 25
Total Samples Analyzed: 25

Sample Number	Lab Number	Analyte	Result	Result Units	Reporting Limit*	Method Reference
---------------	------------	---------	--------	--------------	------------------	------------------

* The Reporting Limit represents the lowest amount of analyte that the laboratory can confidently detect in the sample, and is not a regulatory level. The Units for the Reporting Limit are the same as the Units for the Final Results.



Kevin Poon, Laboratory Analyst, Hayward Laboratory

Analytical results and reports are generated by SGS Forensic Laboratories at the request of and for the exclusive use of the person or entity (client) named on such report. Results, reports or copies of same will not be released by SGS Forensic Laboratories to any third party without prior written request from client. This report applies only to the sample(s) tested. Supporting laboratory documentation is available upon request. This report must not be reproduced except in full, unless approved by SGS Forensic Laboratories. The client is solely responsible for the use and interpretation of test results and reports requested from SGS Forensic Laboratories. SGS Forensic Laboratories is not able to assess the degree of hazard resulting from materials analyzed. SGS Forensic Laboratories reserves the right to dispose of all samples after a period of thirty (30) days, according to all state and federal guidelines, unless otherwise specified. Any modifications that have been made to referenced test methods are documented in SGS Forensic Laboratories' Standard Operating Procedures Manual. Sample results have not been blank corrected. Quality control and sample receipt condition were acceptable unless otherwise noted.

Note* Sampling data used in this report was provided by the client as noted on the associated chain of custody form.

Pair Chip Sample Request Form

Client: HAY01

Site: Contra Costa College 2600 Mission Bell Drive
San Pablo, CA USA

Sampled By: Jose Acosta

FACS: San Francisco, CA Office

Date: 05/26/2021 - 05/28/2024

Critical Solutions, Inc.

Client #: C26770

PM: Gary Bruce Lowe

Contact: Gary Bruce Lowe

Phone: 510-266-4600

Proj #: PJ63338

Turnaround Time:	<12hr	Same-D	1-Day	2-Day	3-Day	5-Day	Other Due Date & Time:
Analysis:	Flame AA (Pb)	Other					
Email results to:	FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com						

Sample #	Sample Location	Component	Color	Substrate	Condition
PsbN-Pb001	PsbN / PS-109 / west wall	Wall	white	Drywall	I
-Pb002	/ PS-109 / Entrance	Door frame	Gray	Metal	↓
Pb003	VOID	Door	Gray	Metal	OLA
-Pb004	Corridor 1 above Entrance	Trim	Beige	Wood	I
-Pb005	Corridor 1 / Center	hand Rail	Gray	Metal	↓
-Pb006	VOID	Trim	Brown	wood	JLA
-Pb007	RM PS-113 / south above	Duct	Red	metal	I

ubstrate: wood, metal, concrete, plaster, drywall, brick

Shipped via:	FedEx	Airborne	UPS	US Mail	Drop Off	Courier	Other
Relinquished by: <i>Rafzinski</i>	Relinquished by:	Relinquished by:					Relinquished by:
Date and Time: <i>03 June 2021 / 13:10</i>	Date and Time:	Date and Time:					Date and Time:
Received by:	Received by:	Received by:					Received by:
Date and Time:	Date and Time:	Date and Time:					Date and Time:

Pair Chip Sample Request Form

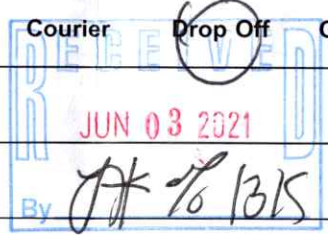
Client: HAY01 **Site:** Contra Costa College 2600 Mission Bell Drive San Pablo, CA USA **Sampled By:** JA
FACS: San Francisco, CA Office **Client #:** C26770 **Date:** 5/26/21 - 5/28/21
 Critical Solutions, Inc. **PM:** Gary Bruce Lowe
Contact: Gary Bruce Lowe **Phone:** 510-266-4600 **Proj #:** PJ63338

Turnaround Time:	<input type="checkbox"/> <12hr <input type="checkbox"/> Same-D <input type="checkbox"/> 1-Day <input type="checkbox"/> 2-Day <input type="checkbox"/> 3-Day <input checked="" type="checkbox"/> 5-Day Other Due Date & Time:
Analysis:	<input checked="" type="checkbox"/> Flame AA (Pb) <input type="checkbox"/> Other
Email results to:	FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com

Sample #	Sample Location	Component	Color	Substrate	Condition
Psb n - Pb015	Psb n / RM PS-106 / Door Frame	Door Frame	Brown	metal	I
- Pb016	RM-PS-132 / Lecture Hall / above ceiling	wall column	Black	Drywall	↓
- Pb017	womans RR / south wall	FLOOR tile Ceramic FT-JLA	Brown	ceramic	
- Pb018	Corridor 2 / casing	Void	Beige	metal	
- Pb019	woman's RR / south wall	wall tile	Red	ceramic	
- Pb020	RM 130 / north west corner	wall	yellow	Drywall	
✓ - Pb021	✓ RM exploritorium / 132 Entrance	wall	Black	wood	

ubstrate: wood, metal, concrete, plaster, drywall, brick

Shipped via:	<input type="checkbox"/> FedEx <input type="checkbox"/> Airborne <input type="checkbox"/> UPS <input type="checkbox"/> US Mail <input checked="" type="checkbox"/> Courier <input type="checkbox"/> Drop Off <input type="checkbox"/> Other	
Relinquished by: Radzinski Date and Time: 03 June 2021 / 1310	Relinquished by: Date and Time:	Relinquished by: Date and Time:
Received by: Date and Time:	Received by: Date and Time:	Received by: Date and Time:



Pair Chip Sample Request Form

Client: HAY01

Site: Contra Costa College 2600 Mission Bell Drive
San Pablo, CA USA

Sampled By: JA & AA

FACS: San Francisco, CA Office

Date: 5/26/21 - 5/28/21

Critical Solutions, Inc.

Client #: C26770

PM: Gary Bruce Lowe

Contact: Gary Bruce Lowe

Phone: 510-266-4600

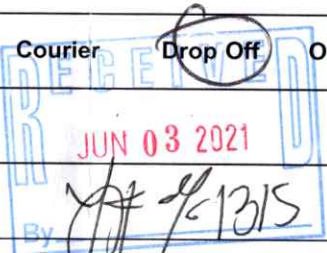
Proj #: PJ63338

Turnaround Time:	<12hr	Same-D	1-Day	2-Day	3-Day	5-Day	Other Due Date & Time:
Analysis:	Flame AA (Pb)	Other					
Email results to:	FACSLabsSF@forensicanalytical.com and gary.lowe@forensicanalytical.com						

Sample #	Sample Location	Component	Color	Substrate	Condition
PsbN - Pb022	PSB north / Corridor / above ceiling beam	Beam	Red	Metal	I
- Pb023	PSB North / Roof F / West area	Gutter	Brown	Metal	
- Pb024	/ Roof G / SW area	Dome joint	Red	Metal	
- Pb025	/ ↓ / ↓	Dome siding	Red	Wood	↓
- Pb026	/ Roof J / South area	Cabinet door	Black	Wood	P
- Pb027	↓ / Roof J / South area	Rail	Brown	Metal	I
- Pb028	PSB North exterior / North area, North door	Door	Black	Metal	↓

Substrate: wood, metal, concrete, plaster, drywall, brick

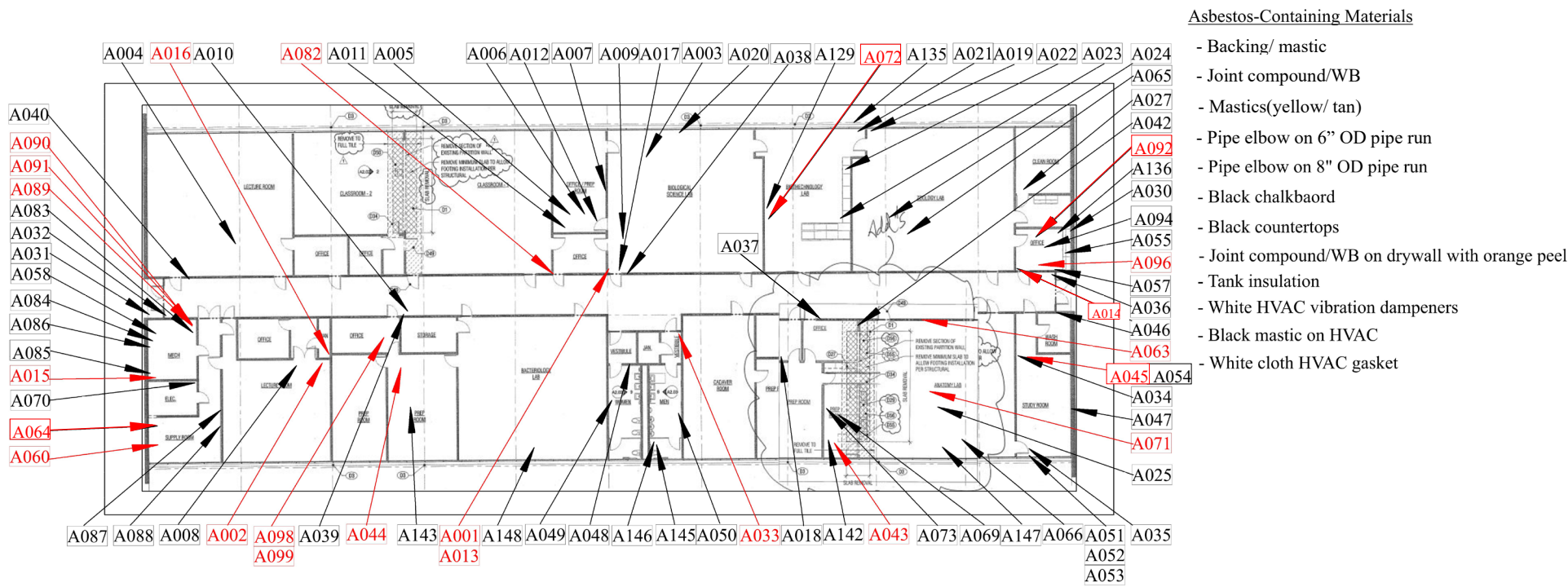
Shipped via:	FedEx	Airborne	UPS	US Mail	Courier	Drop Off	Other
Relinquished by: Radzawski	Relinquished by:			Relinquished by:			
Date and Time: 03 June 2021 / 12:10	Date and Time:			Date and Time:			
Received by:	Received by:			Received by:			
Date and Time:	Date and Time:			Date and Time:			



Appendix B

Sample Location Drawings





Biological Science Building – Asbestos Sample Location Map, Page 1

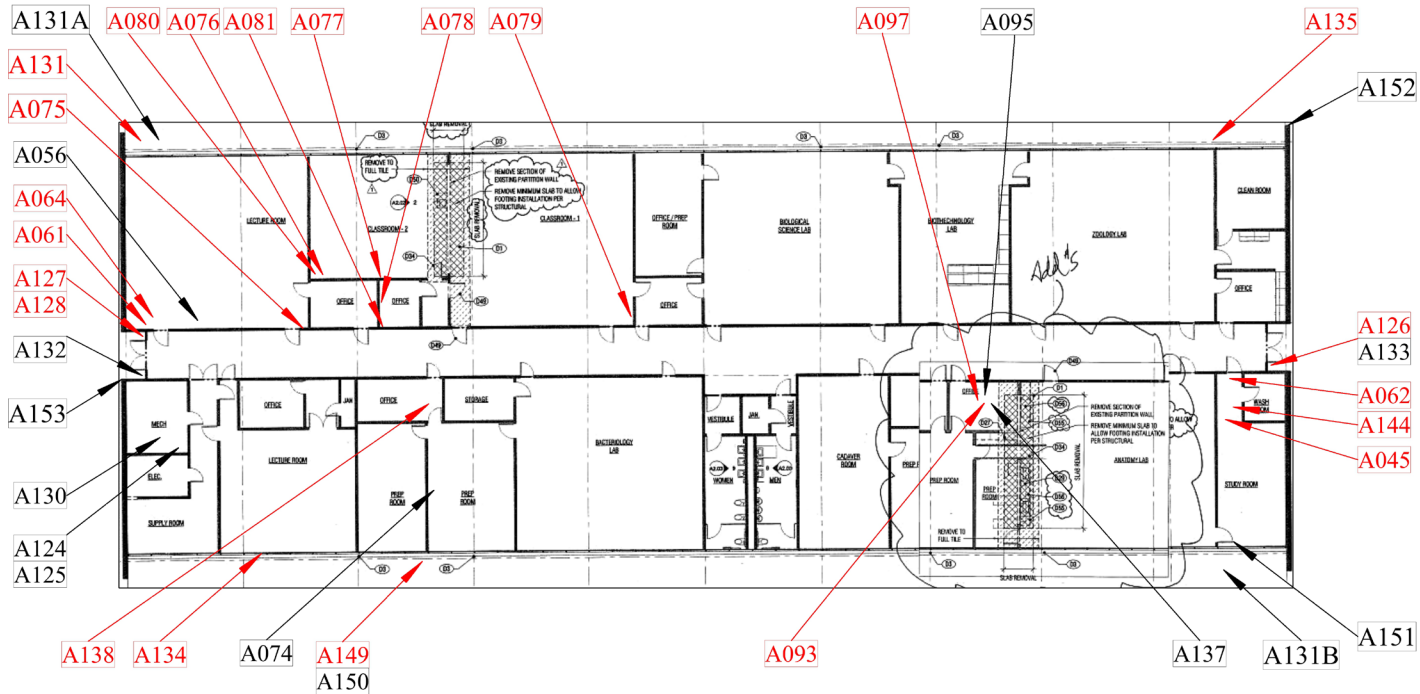
SAMPLE LOCATION MAP

Contra Costa College New Science Building Project
 2600 Mission Bell Drive
 San Pablo, CA 94806
 FACS # PJ63338, May 24 to June 2, 2021

LEGEND

Positive Asbestos Bulk Sample Location: **BIO – A001, A002, A013-A016, A033, A043-A045, A060, A063, A064, A071, A072, A082, A089-A092, A096, A098, A099**





Asbestos-Containing Materials

- Pipe elbow on 6" OD pipe run
- Black chalkboard
- Texture
- Joint compound/WB on drywall with orange peel
- White HVAC vibration dampeners
- Black mastic on HVAC
- Skim coat
- Concrete slab exterior
- Light gray caulk exterior

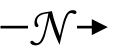
Biological Science Building – Asbestos Sample Location Map, Page 2

SAMPLE LOCATION MAP







Contra Costa College New Science Building
 Project
 2600 Mission Bell Drive
 San Pablo, CA 94806
 FACS # PJ63338, May 24 to June 2, 2021

LEGEND

Positive Asbestos Bulk Sample Location: **BIO – A045, A061, A062, A064, A075-A081, A093, A097, A126-A128, A131, A134, A135, A138, A144, A149**





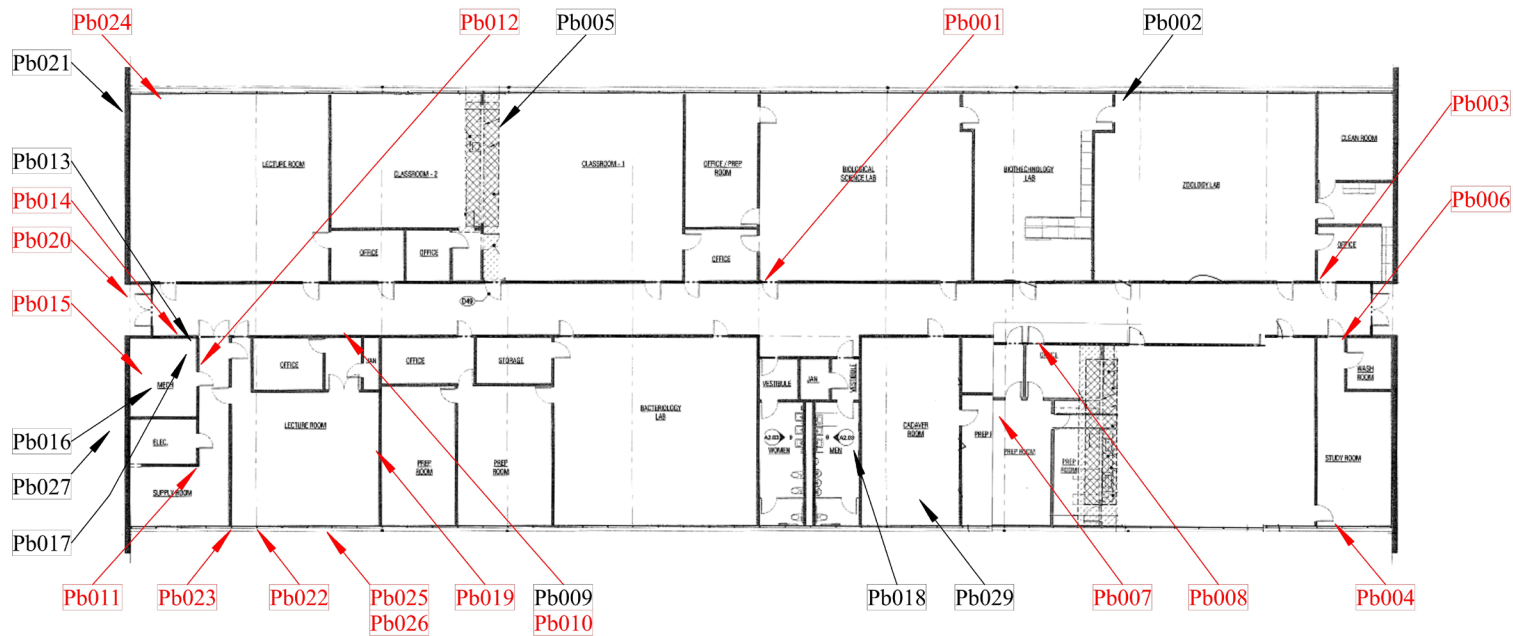
-  - Tan sheet flooring w/ mottle pattern
-  - Green carpet mastic
-  - 12" x 12" FT off-white w/ blue specks over yellow mastic
-  - 12" x 12" FT off-white w/ gray streaks w/ yellow mastic
-  - Beige sheet flooring w/ mottle pattern
-  - Dark tan RSF w/ mottle pattern

Biological Science Building – Homogeneous Area Map

HOMOGENEOUS AREA MAP

Contra Costa College New Science Building
 Project
 2600 Mission Bell Drive
 San Pablo, CA 94806
 FACS # PJ63338, May 24 to June 2, 2021





Lead-Containing Materials

- Orange paint on gypsum board wall
- Beige paint on gypsum board wall
- Off-white paint on plaster wall
- Black paint on metal I-beam
- White paint on wood wall trim
- Blue paint on wood door
- Off-white paint on wood beam
- Yellow paint on metal pipe
- Red paint on metal pipe valve
- White paint on stucco soffit
- White paint on metal louver shade
- Beige paint on metal wall louver header trim
- Brown paint on metal parapet cap
- White paint on wood eave joist
- Gray paint on metal exhaust flue
- Off-white ceramic wall

Biological Science Building – Lead Sample Location Map

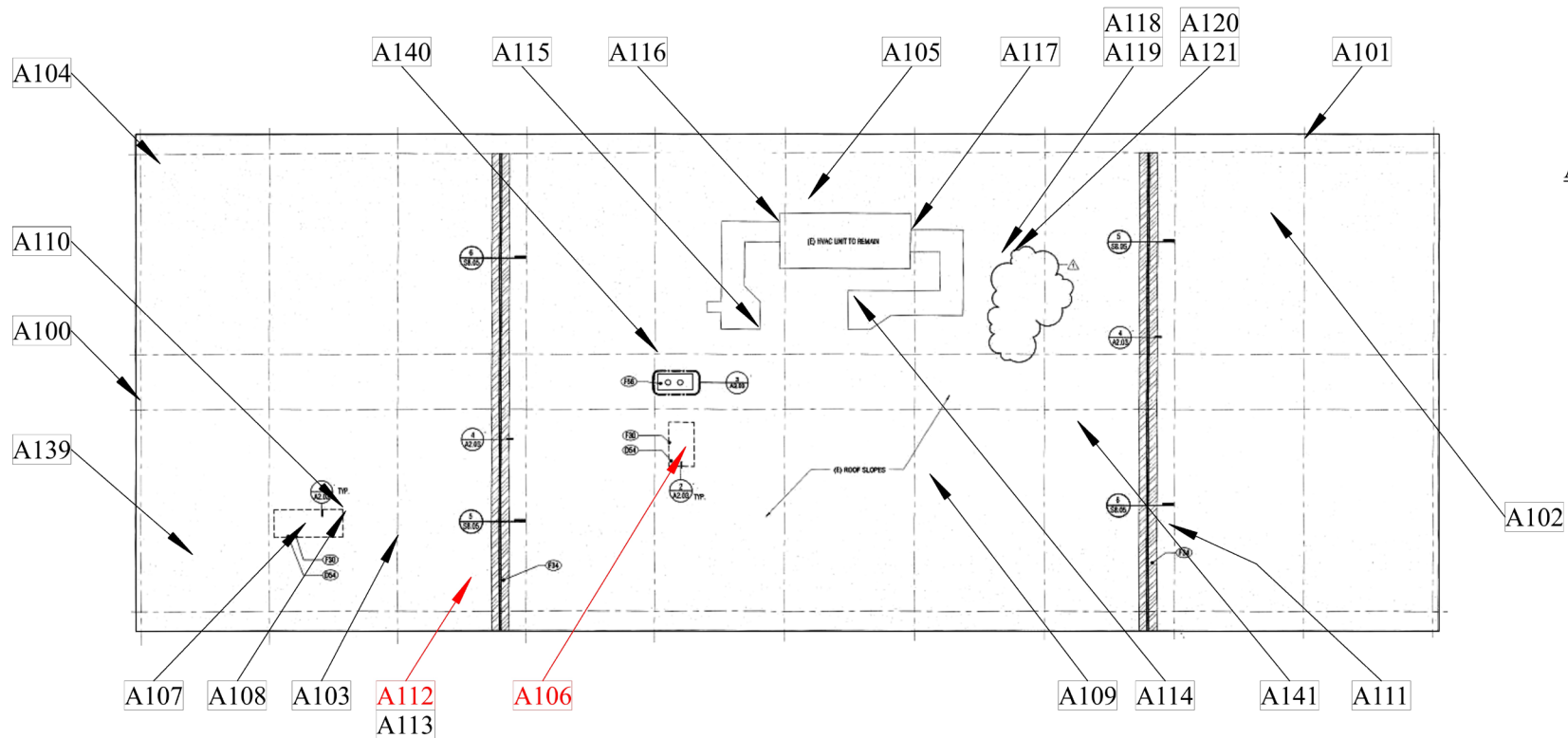
SAMPLE LOCATION MAP

Contra Costa College New Science Building
 Project
 2600 Mission Bell Drive
 San Pablo, CA 94806
 FACS # PJ63338, May 24 to June 2, 2021

LEGEND

Positive Lead Bulk Sample Location: **BIO – Pb001, Pb003, Pb004, Pb006, Pb007, Pb008, Pb010, Pb011, Pb012, Pb014, Pb015, Pb019, Pb020, Pb022, Pb023, Pb024, Pb025, Pb026**





Asbestos-Containing Materials

- Paint (silver)
- Dark gray sealant

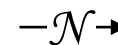
Biological Science Building, Roof – Asbestos Sample Location Map

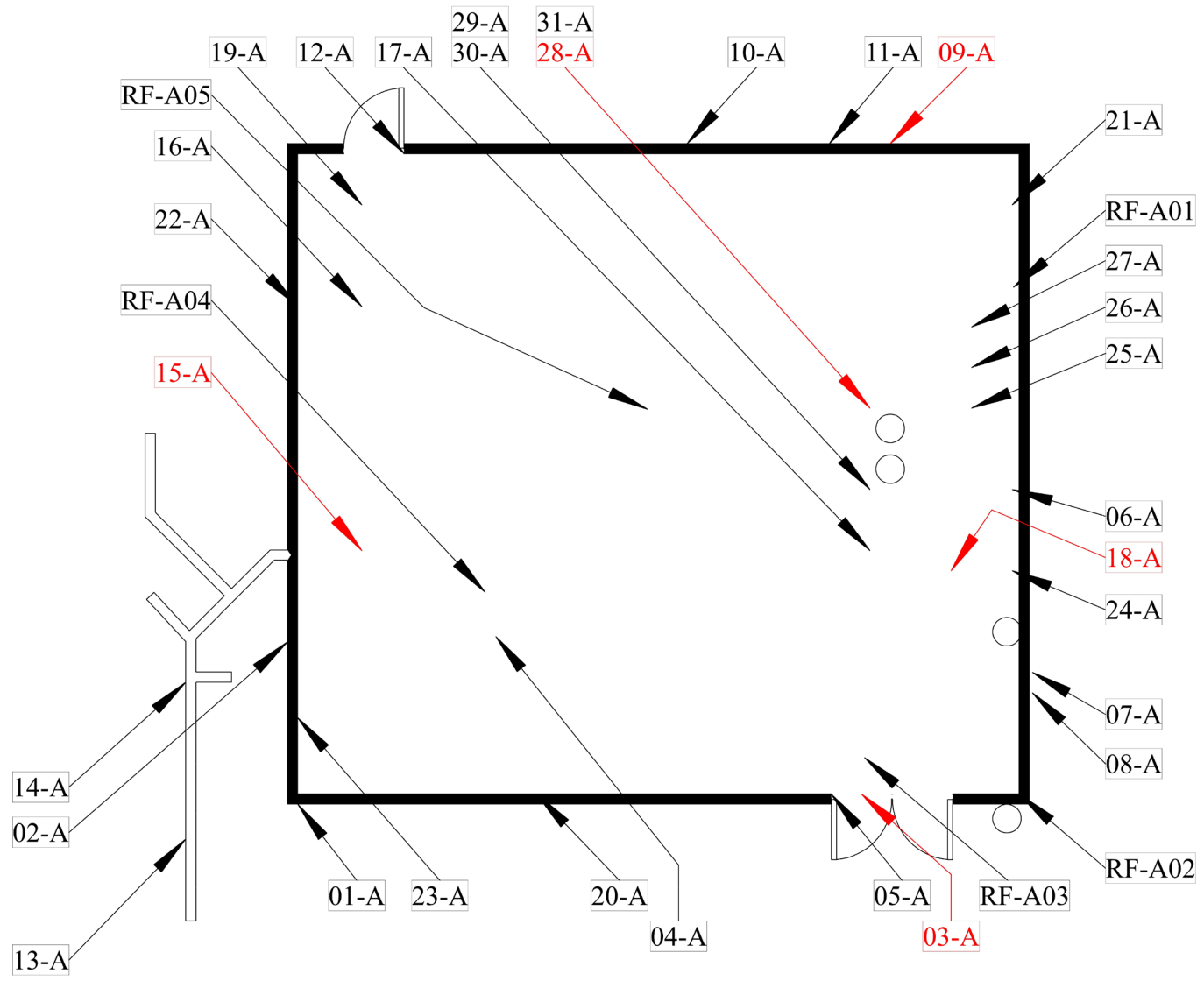
SAMPLE LOCATION MAP

Contra Costa College New Science Building
 Project
 2600 Mission Bell Drive
 San Pablo, CA 94806
 FACS # PJ63338, May 24 to June 2, 2021

LEGEND

Positive Asbestos Bulk Sample Location: **BIO – A106, A112**





Asbestos-Containing Materials

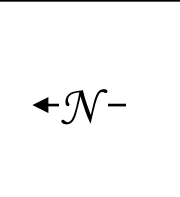
- Concrete
- Sealant
- TSI

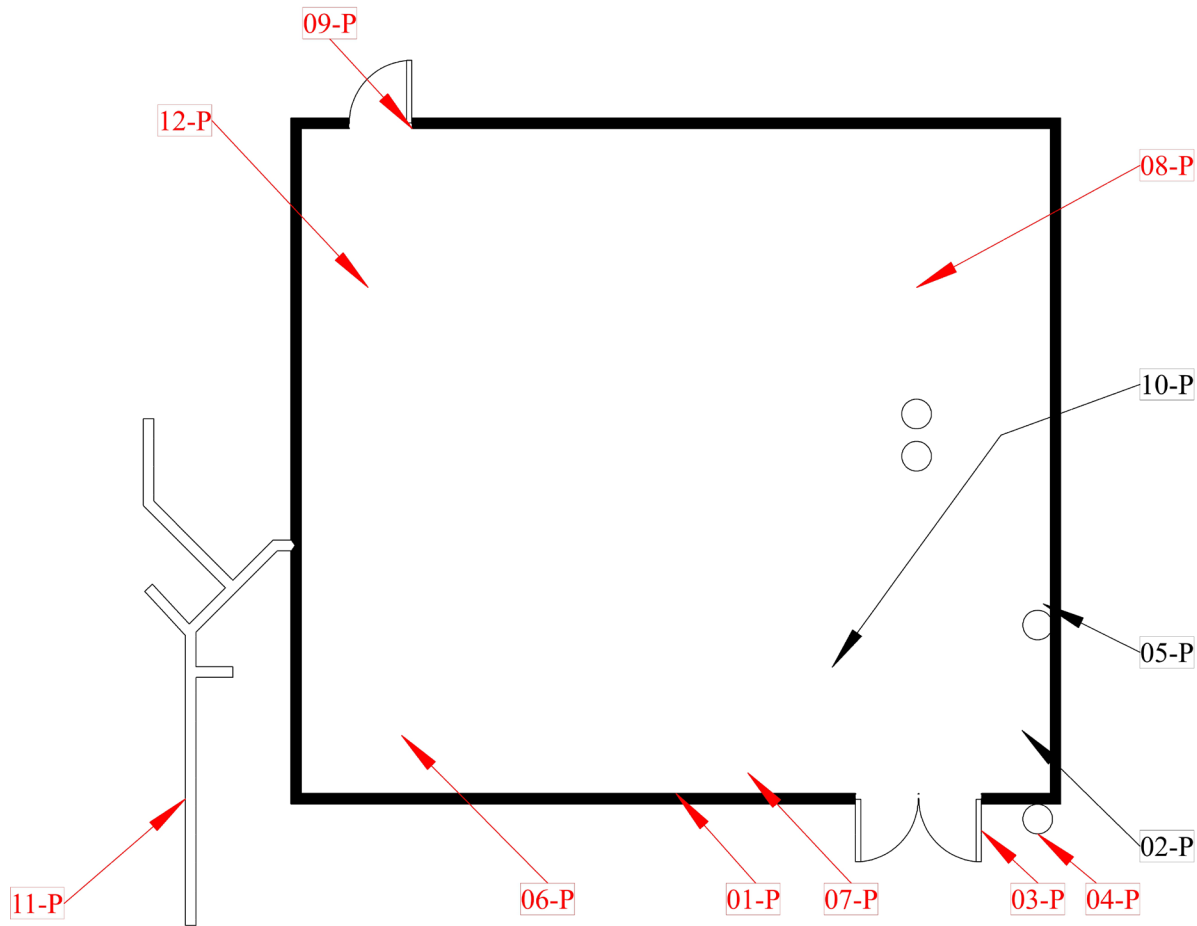
Boiler Room

SAMPLE LOCATION DRAWING
 Contra Costa College New Science Building
 Project
 2600 Mission Bell Drive
 San Pablo, CA 94806
 FACS # PJ63338, May 24 to June 2, 2021

LEGEND
 Positive Asbestos Bulk Sample Location: **BR - 03-A, 09-A, 15-A, 18-A, 28-A**

FACS 35
 Forensic Analytical Consulting Services
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Lead-Containing Materials

- Pink paint on concrete wall
- Brick red paint on metal door
- Brick red paint on metal pipe
- Ferrari red paint on metal pipe flange/caps
- Yellow paint on metal pipes/flanges
- Blue paint on TSI
- Blue paint on metal doorframe
- Grey paint on metal pipe
- Grey paint on metal pedestal

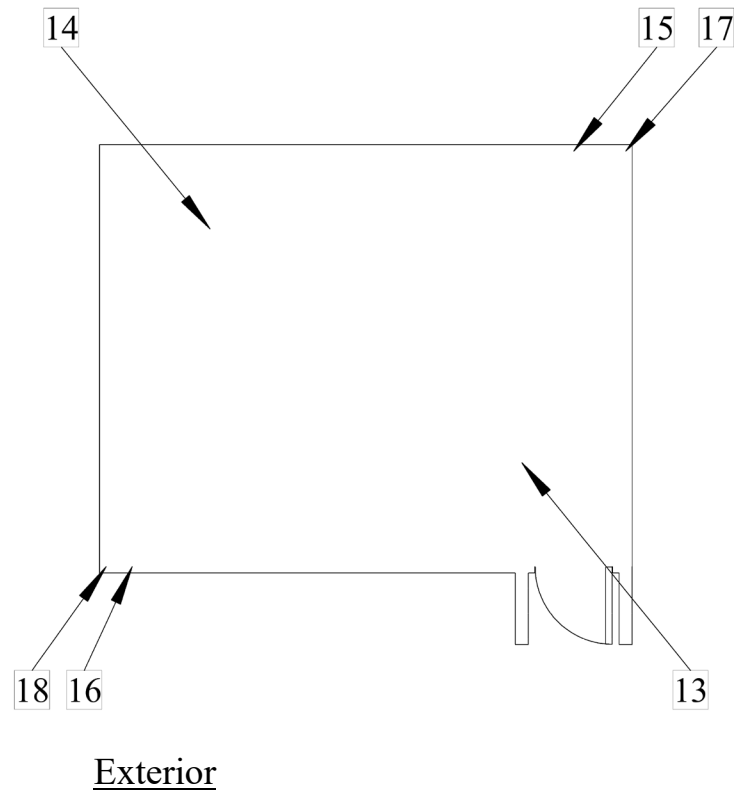
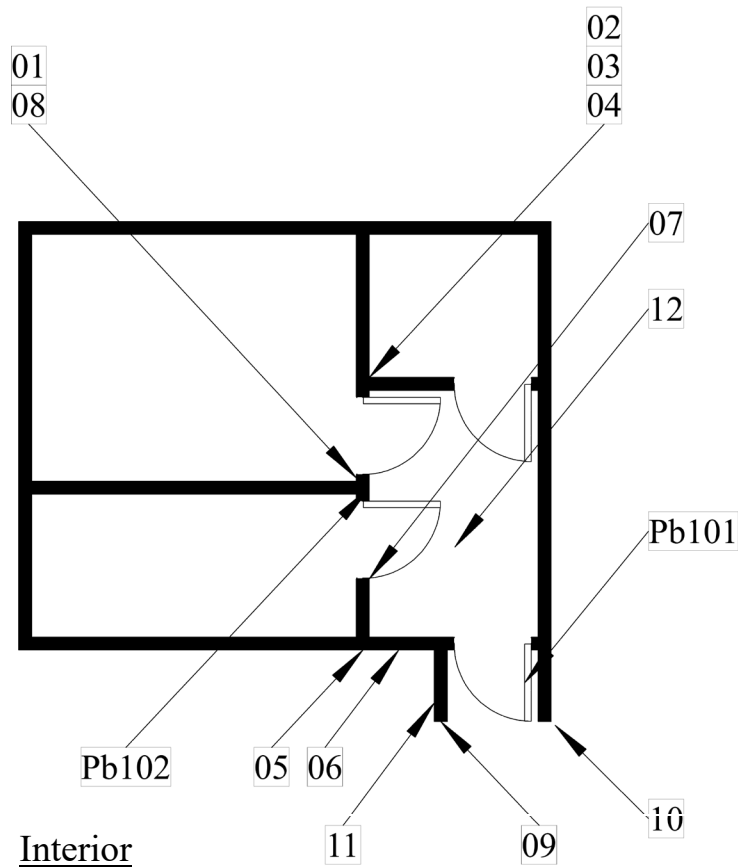
Boiler Room – Lead Sample Location Drawing

SAMPLE LOCATION DRAWING

Contra Costa College New Science Building
 Project
 2600 Mission Bell Drive
 San Pablo, CA 94806
 FACS # PJ63338, May 24 to June 2, 2021

LEGEND

Positive Lead Bulk Sample Location: BR – 01-P, 03-P, 04-P, 06-P,
 07-P, 08-P, 09-P, 11-P, 12-P



Chemical Storage Building – Asbestos and Lead Sample Location Drawing

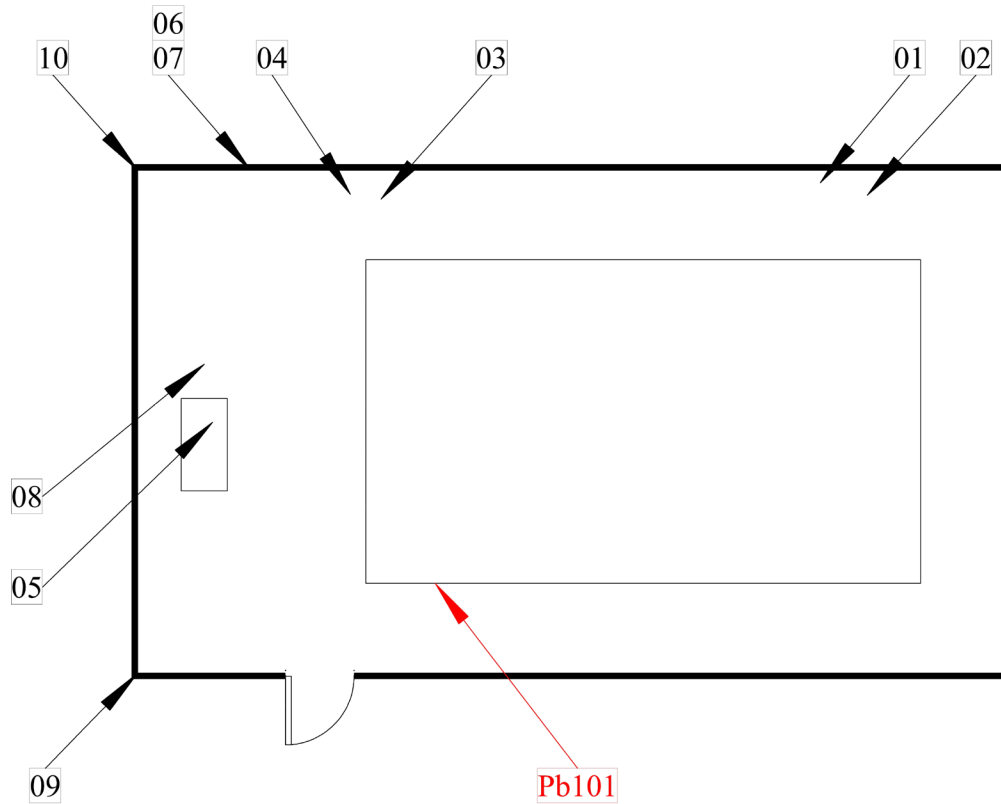
SAMPLE LOCATION DRAWING

Contra Costa College New Science Building
Project
2600 Mission Bell Drive
San Pablo, CA 94806
FACS # PJ63338, May 24 to June 2, 2021

LEGEND

Positive Asbestos Bulk Sample Location: N/A
Positive Lead Bulk Sample Location: N/A





Lead-Containing Materials

- Gray paint on metal chiller component

Chiller Enclosure – Asbestos and Lead Sample Location Drawing

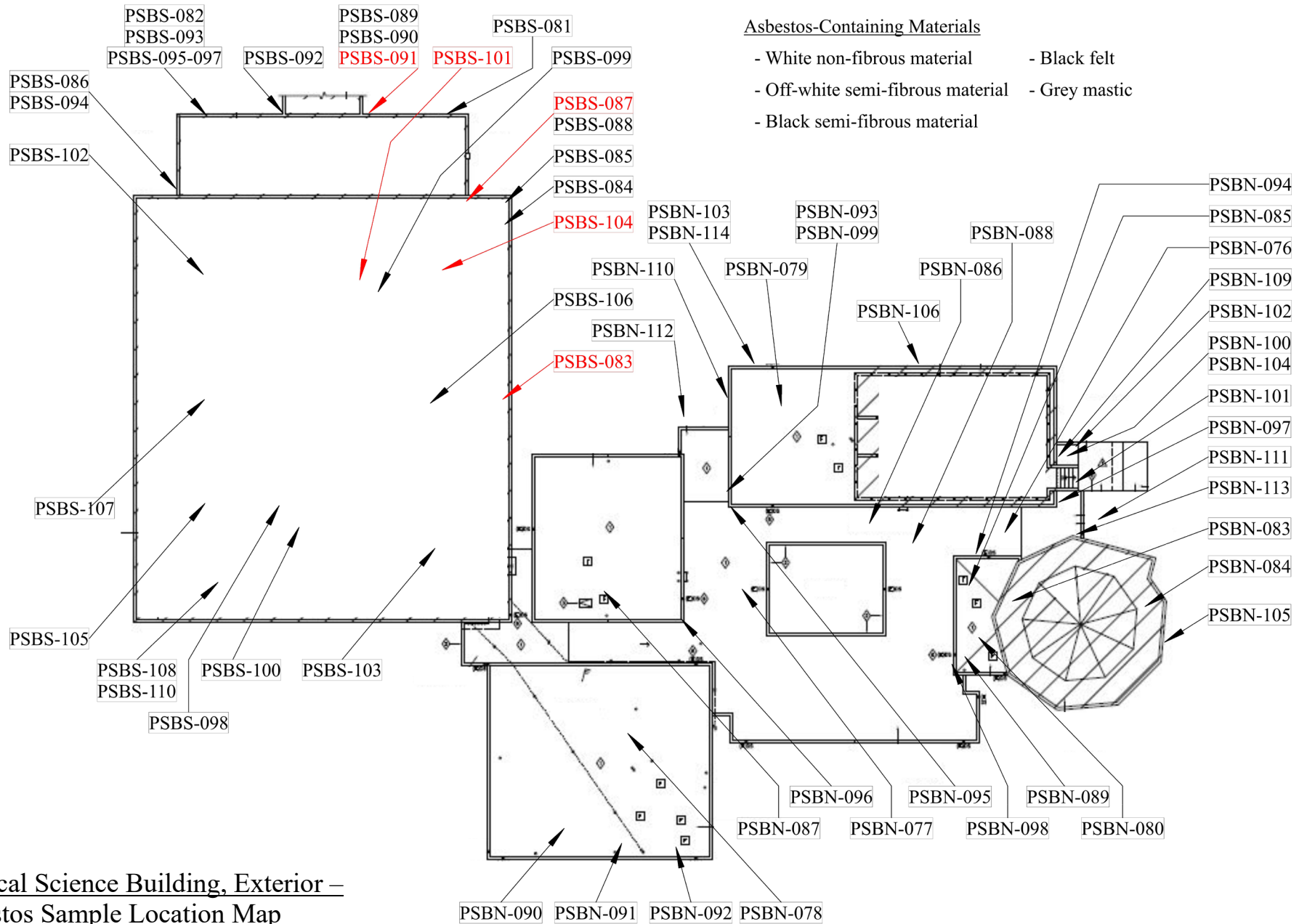
SAMPLE LOCATION DRAWING

Contra Costa College New Science Building
 Project
 2600 Mission Bell Drive
 San Pablo, CA 94806
 FACS # PJ63338, May 24 to June 2, 2021

LEGEND

Positive Asbestos Bulk Sample Location: N/A
 Positive Lead Bulk Sample Location: **CE-Pb-101**





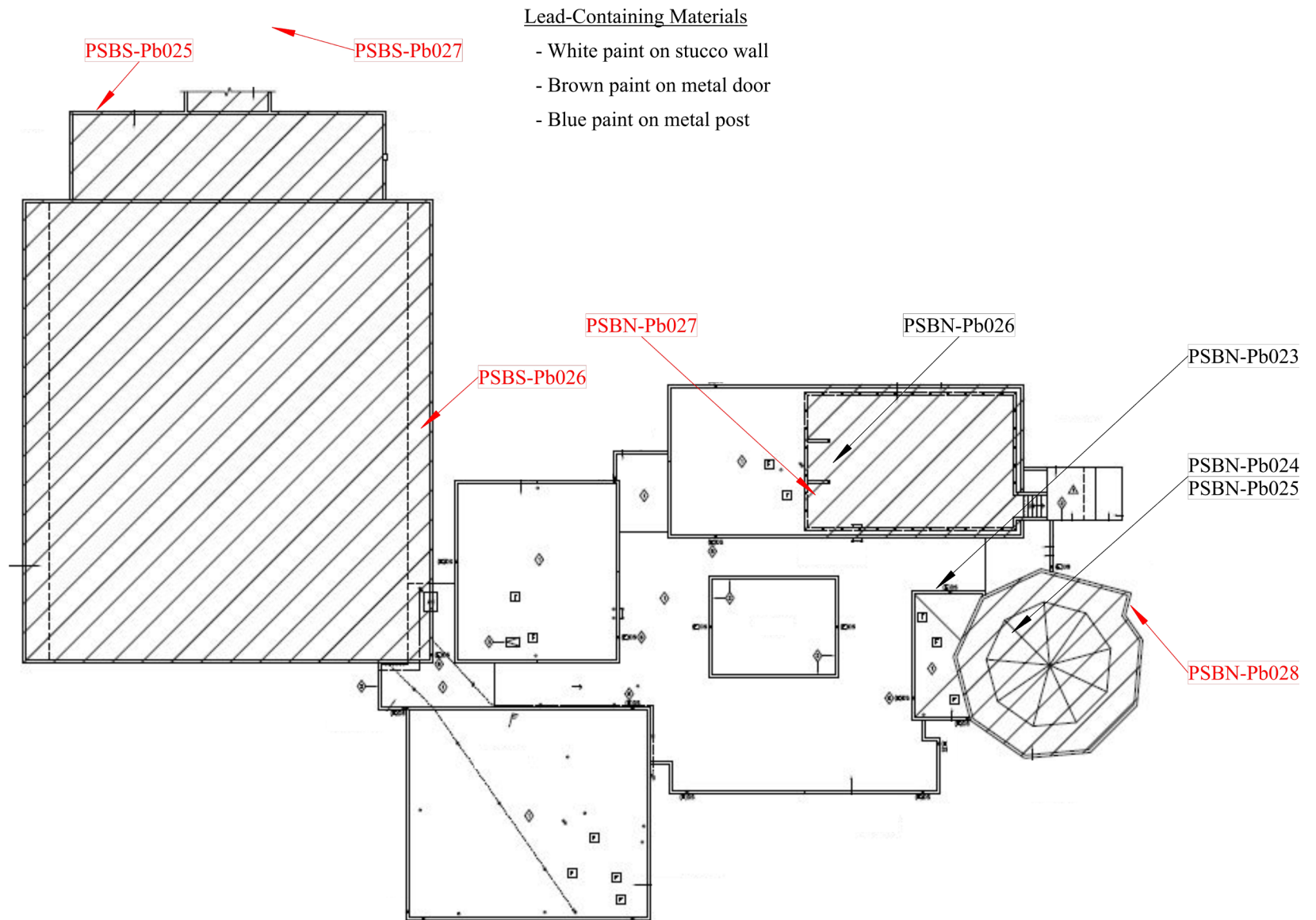
SAMPLE LOCATION MAP

Contra Costa College New Science Building Project
 2600 Mission Bell Drive
 San Pablo, CA 94806
 FACS # PJ63338, May 24 to June 2, 2021

LEGEND

Positive Asbestos Bulk Sample Location: **PSBS – 083, 087, 091, 101, 104**





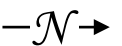
Physical Science Building, Exterior – Lead Sample Location Map

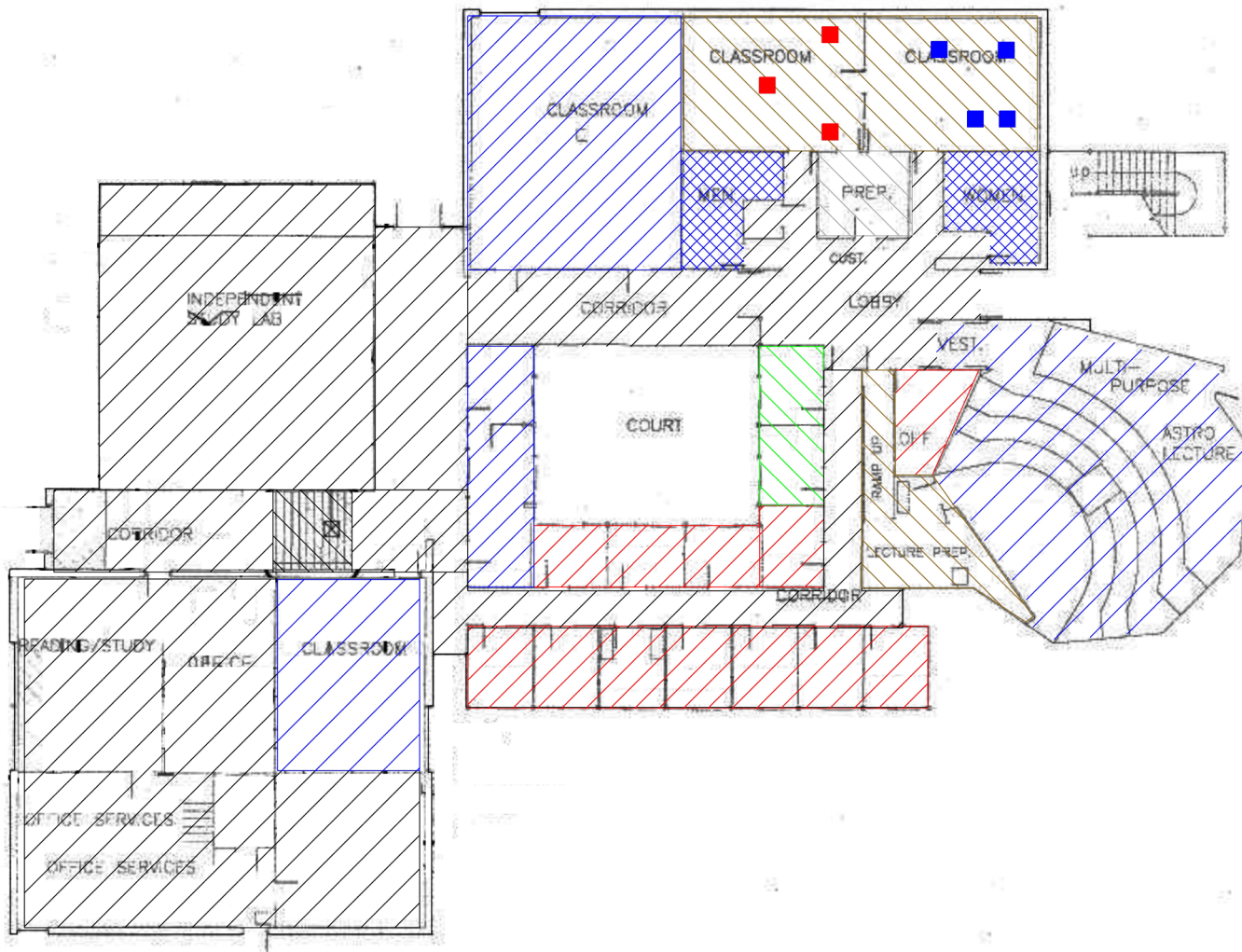
SAMPLE LOCATION MAP











Contra Costa College New Science Building
Project
2600 Mission Bell Drive
San Pablo, CA 94806
FACS # PJ63338, May 24 to June 2, 2021

LEGEND

Positive Lead Bulk Sample Location: **PSBS – Pb025, Pb026, Pb027**
PSBN – Pb027, Pb028

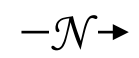


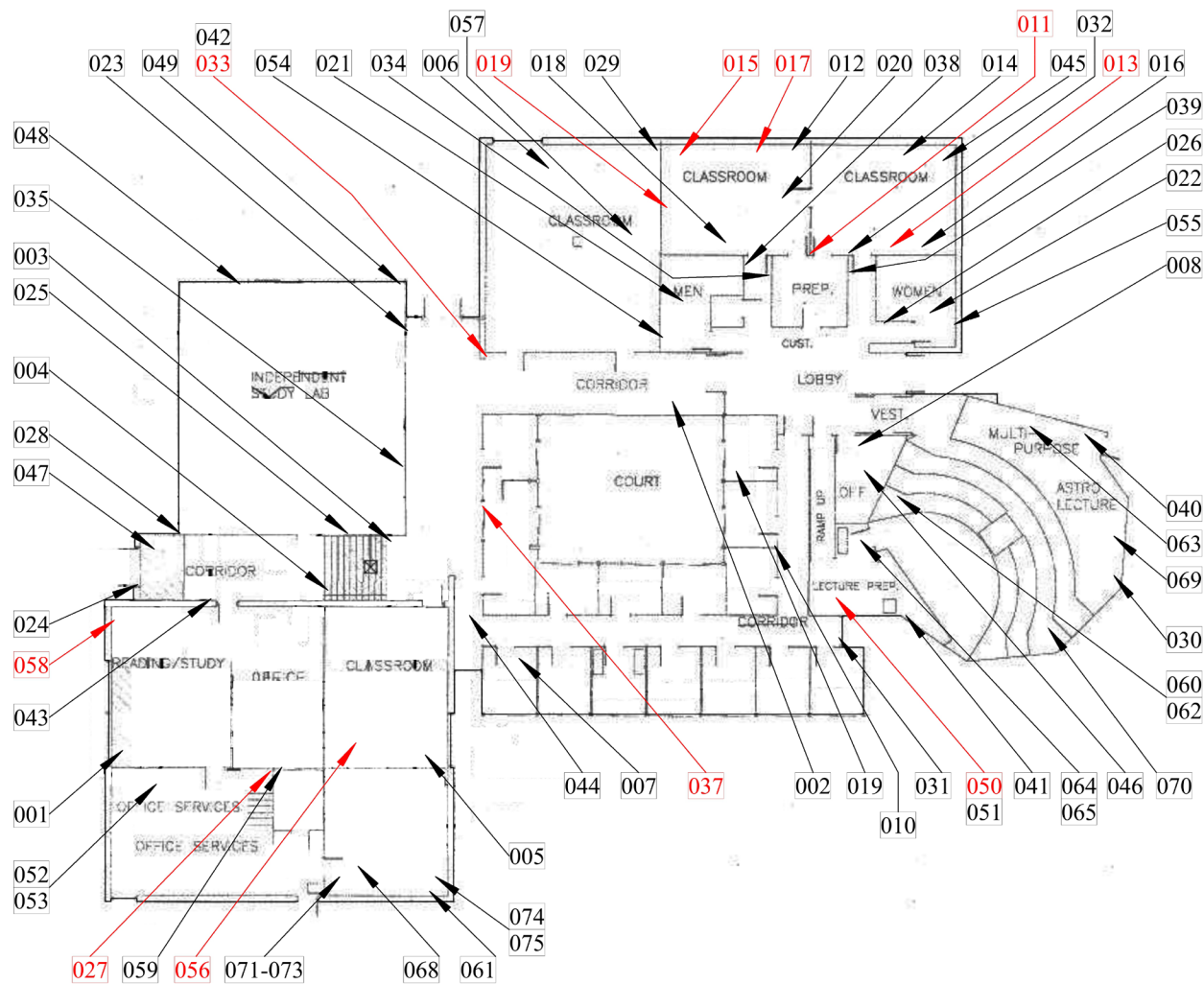


-  - 12" x 12" White w/ blue specks FT
-  - Gray VSF
-  - Blue carpet
-  - Red carpet
-  - Brown carpet
-  - 12" x 12" Brown w/ white specks FT
-  - 12" x 12" Dark gray w/ white streaks FT
-  - 12" x 12" Blue w/ white streaks FT
-  - 12" x 12" Red FT
-  - 2" x 2" Gray ceramic FT and grout

Physical Science Building, North Area – Homogeneous Area Map

HOMOGENEOUS AREA MAP
 Contra Costa College New Science Building
 Project
 2600 Mission Bell Drive
 San Pablo, CA 94806
 FACS # PJ63338, May 24 to June 2, 2021





Asbestos-Containing Materials

- 12" x 12" Brown w/ white specks FT over black mastic
- 12" x 12" Blue w/ white streaks FT over black mastic
- 12" x 12" Beige w/ gray streaks FT over black and brown mastic
- 12" x 12" Red FT over black mastic
- 12" x 12" Gray w/ black dots FT over black mastic
- Wallboard/ joint compound
- Wall texture large splotch
- Wall texture orange peel splotch
- White sink undercoat
- Black lab table
- Black window caulking

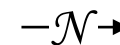
Physical Science Building – North Area

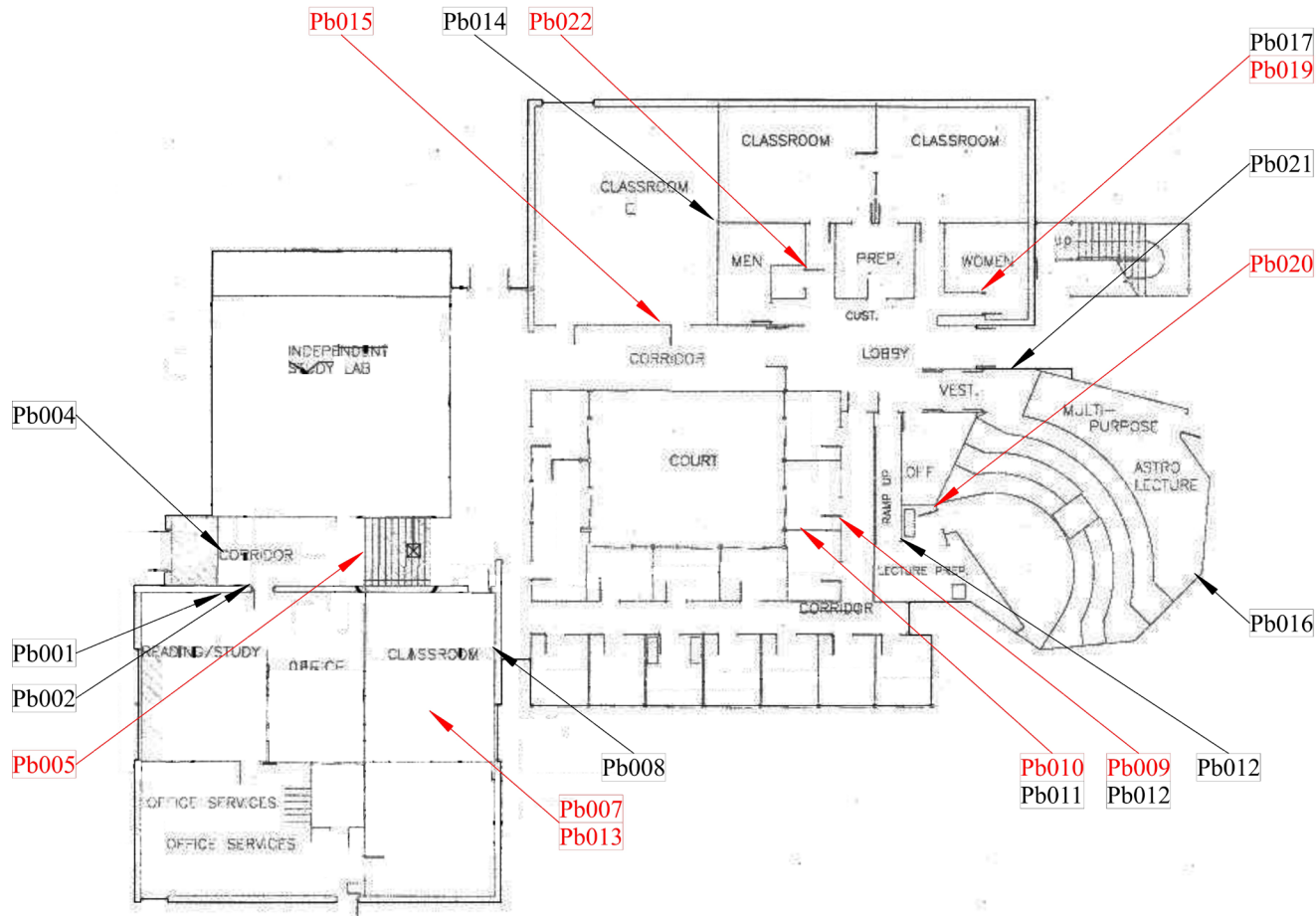
SAMPLE LOCATION DRAWING

Contra Costa College New Science Building
 Project
 2600 Mission Bell Drive
 San Pablo, CA 94806
 FACS # PJ63338, May 24 to May 28, 2021

LEGEND

Positive Asbestos Bulk Sample Location: **PSBN – 011, 013, 015, 017, 019, 027, 033, 037, 050, 056, 058**





Lead-Containing Materials

- Gray paint on metal handrail
- Red paint on metal duct
- Black paint on metal doorframe
- White paint on metal doorframe
- Yellow paint on metal fixture
- Brown paint on metal doorframe
- Red ceramic wall tile
- Yellow paint on gypsum board wall
- Red paint on metal beam

Physical Science Building, North Area, Interior – Lead Sample Location Map







SAMPLE LOCATION MAP

Contra Costa College New Science Building
Project
2600 Mission Bell Drive
San Pablo, CA 94806
FACS # PJ63338, May 24 to June 2, 2021

LEGEND

Positive Lead Bulk Sample Location: **PSBN – Pb005, Pb007, Pb009, Pb010, Pb013, Pb015, Pb019, Pb020, Pb022**

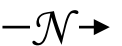


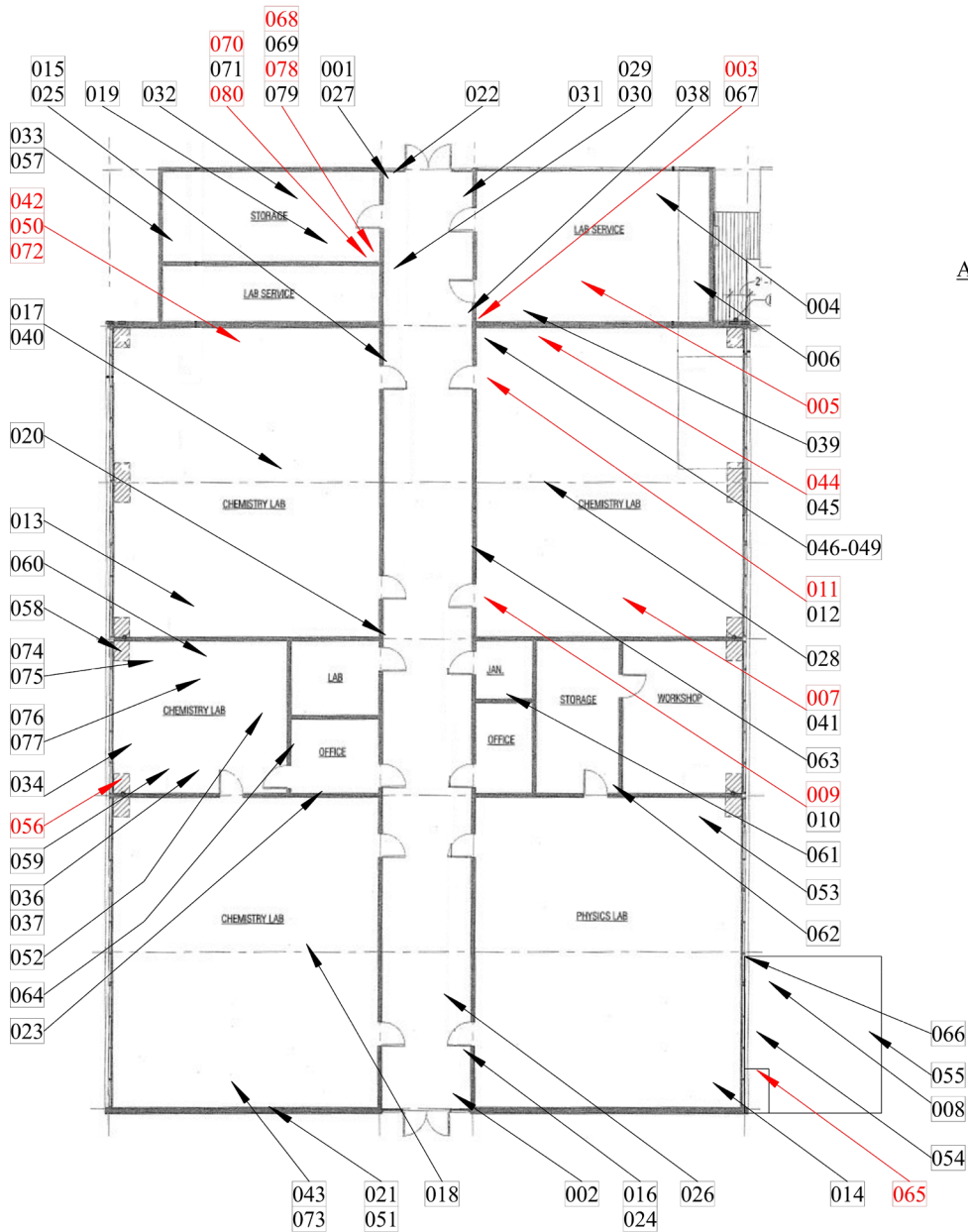
-  - 12" x 12" Gray w/ green streaks FT
-  - 9" x 9" Tan w/ brown streaks FT
-  - 12" x 12" Beige w/ dark gray and white specks FT
-  - 12" x 12" Dark gray w/ white streaks FT
-  - 12" x 12" Red w/ black streaks FT
-  - 12" x 12" Light brown w/ white streaks FT

Physical Science Building, South Area – Homogeneous Area Map

HOMOGENEOUS AREA MAP

Contra Costa College New Science Building
 Project
 2600 Mission Bell Drive
 San Pablo, CA 94806
 FACS # PJ63338, May 24 to June 2, 2021





Asbestos-Containing Materials

- 9" x 9" Tan w/ brown streaks FT over black mastic
- 12" x 12" Beige w/ dark brown and white streaks FT over black mastic
- 12" x 12" Dark gray w/ white streaks FT over black mastic
- 12" x 12" Red w/ black streaks FT over black and yellow mastic
- 12" x 12" Light brown w/ white streaks FT over yellow mastic
- Black exhaust system table top
- Gray exhaust system transite panel
- Black exhaust system transite panel
- Wallboard/ joint compound
- Off-white transite pipe fitting
- Pipe penetration tape and insulation
- Transite exhaust hood
- White transite pipe

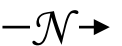
Physical Science Building – South Area

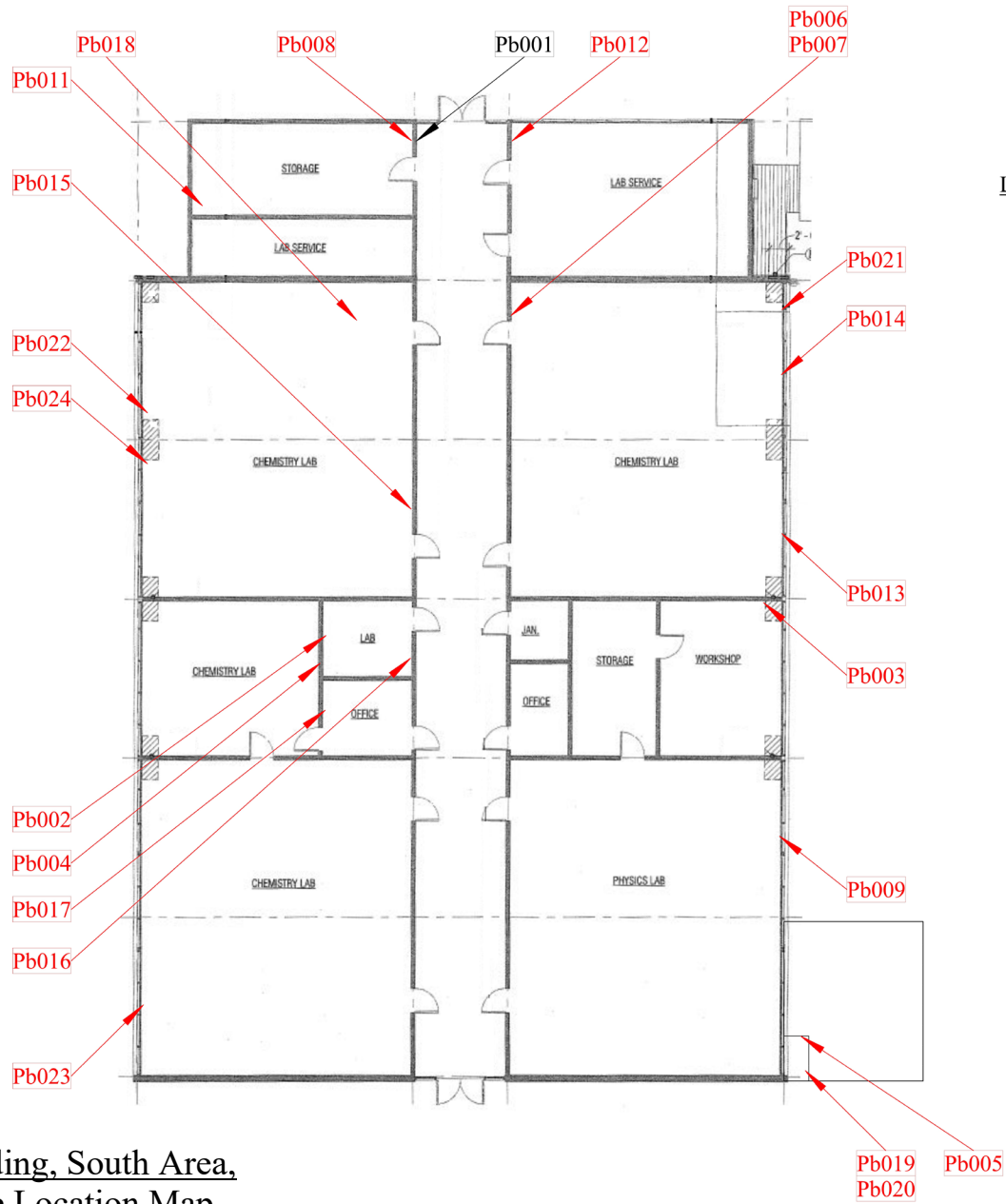
SAMPLE LOCATION DRAWING

Contra Costa College New Science Building
 Project
 2600 Mission Bell Drive
 San Pablo, CA 94806
 FACS # PJ63338, May 24 to May 28, 2021

LEGEND

Positive Asbestos Bulk Sample Location: **PSBS - 003, 005, 007, 009, 011, 042, 044, 050, 056, 065, 068, 070, 072, 078, 080**





Lead-Containing Materials

- Light orange paint on plaster
- Off-white paint on plaster
- Orange paint on plaster
- Dark blue paint on drywall
- Brown paint on metal
- Baby blue paint on metal
- Brown paint on plaster
- Black paint on glass
- Red paint on metal
- Off-white paint on metal
- Off-white paint on drywall
- Green paint on metal
- Green paint on wood
- Baby blue paint on wood
- Brown paint on wood
- Off-white paint on wood
- Light brown paint on wood
- Dark blue paint on metal
- Black paint on metal
- Orange paint on metal
- Light orange paint on transite
- Dark blue paint on transite
- Dark brown paint on metal

**Physical Science Building, South Area,
Interior – Lead Sample Location Map**

SAMPLE LOCATION MAP

Contra Costa College New Science Building
Project
2600 Mission Bell Drive
San Pablo, CA 94806
FACS # PJ63338, May 24 to June 2, 2021

LEGEND

Positive Lead Bulk Sample Location: **PSBS – Pb002, Pb003, Pb004, Pb005, Pb006, Pb007, Pb008, Pb009, Pb011, Pb012, Pb013, Pb014, Pb015, Pb016, Pb017, Pb018, Pb019, Pb020, Pb021, Pb022, Pb023, Pb024**



Appendix C

CDPH Form



LEAD HAZARD EVALUATION REPORT

Section 1 – Date of Lead Hazard Evaluation _____

Section 2 – Type of Lead Hazard Evaluation (Check one box only)

Lead Inspection Risk assessment Clearance Inspection Other (specify) _____

Section 3 – Structure Where Lead Hazard Evaluation Was Conducted

Address [number, street, apartment (if applicable)]		City	County	Zip Code
Construction date (year) of structure	Type of structure <input type="checkbox"/> Multi-unit building <input type="checkbox"/> School or daycare <input type="checkbox"/> Single family dwelling <input type="checkbox"/> Other _____	Children living in structure? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Don't Know		


Section 4 – Owner of Structure (if business/agency, list contact person)

Name		Telephone number		
Address [number, street, apartment (if applicable)]		City	State	Zip Code

Section 5 – Results of Lead Hazard Evaluation (check all that apply)

No lead-based paint detected
 Intact lead-based paint detected
 Deteriorated lead-based paint detected
 No lead hazards detected
 Lead-contaminated dust found
 Lead-contaminated soil found
 Other _____

Section 6 – Individual Conducting Lead Hazard Evaluation

Name		Telephone number		
Address [number, street, apartment (if applicable)]		City	State	Zip Code
CDPH certification number	Signature			Date

Name and CDPH certification number of any other individuals conducting sampling or testing (if applicable)

Section 7 – Attachments

- A. A foundation diagram or sketch of the structure indicating the specific locations of each lead hazard or presence of lead-based paint;
- B. Each testing method, device, and sampling procedure used;
- C. All data collected, including quality control data, laboratory results, including laboratory name, address, and phone number.

First copy and attachments retained by inspector
 Second copy and attachments retained by owner

Third copy only (no attachments) mailed or faxed to:
 California Department of Public Health
 Childhood Lead Poisoning Prevention Branch Reports
 850 Marina Bay Parkway, Building P, Third Floor
 Richmond, CA 94804-6403
 Fax: (510) 620-5656

Appendix D

FACS Personnel Certifications



State of California
Division of Occupational Safety and Health
Certified Site Surveillance Technician

Anthony T Aguilar

Name

Certification No. **19-6525**

Expires on **06/12/22**

This certification was issued by the Division of Occupational Safety and Health as authorized by Sections 7180 et seq. of the Business and Professions Code.





STATE OF CALIFORNIA
DEPARTMENT OF PUBLIC HEALTH



LEAD-RELATED CONSTRUCTION CERTIFICATE

INDIVIDUAL:



Anthony Aguilar

CERTIFICATE TYPE:

Lead Sampling Technician

NUMBER:

LRC-00001334

EXPIRATION DATE:

6/11/2022

Disclaimer: This document alone should not be relied upon to confirm certification status. Compare the individual's photo and name to another valid form of government issued photo identification. Verify the individual's certification status by searching for Lead-Related Construction Professionals at www.cdph.ca.gov/programs/clppb or calling (800) 597-LEAD.

State of California
Division of Occupational Safety and Health
Certified Site Surveillance Technician

Virgilito C. Sevilla

Name



Certification No. ~~19-6720~~

Expires on ~~10/06/21~~

This certification was issued by the Division of Occupational Safety and Health as authorized by Sections 7180 et seq. of the Business and Professions Code.



STATE OF CALIFORNIA
DEPARTMENT OF PUBLIC HEALTH



LEAD-RELATED CONSTRUCTION CERTIFICATE

INDIVIDUAL:



Virgilito Sevilla

CERTIFICATE TYPE:

Lead Sampling Technician

NUMBER:

LRC-00002983

EXPIRATION DATE:

9/12/2021

Disclaimer: This document alone should not be relied upon to confirm certification status. Compare the individual's photo and name to another valid form of government issued photo identification. Verify the individual's certification status by searching for Lead-Related Construction Professionals at www.cdph.ca.gov/programs/clppb or calling (800) 597-LEAD.

DEPARTMENT OF INDUSTRIAL RELATIONS
 Division of Occupational Safety and Health
 Asbestos Certification & Training Unit

1750 Howe Avenue, Suite 460

Sacramento, CA 95825

(916) 574-2993 Office <http://www.dir.ca.gov/dosh/asbestos.html> acru@dir.ca.gov



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April 07, 2021

Martin G Alvarez
344 Egret Place
Pittsburg CA 94565

Dear Certified Asbestos Consultant or Technician:

Enclosed is your certification card. **To maintain your certification, you must abide by the rules printed on the back of the certification card.**

Your certification is valid for a period of one year. If you wish to renew your certification, you must apply for renewal at least 60 days before the expiration date shown on your card. [8 CCR 341.15(h)(1)].

Please hold and do not send copies of your required AHERA refresher renewal certificates to our office until you apply for renewal of your certification.

Certificates must be kept current if you are actively working as a CAC or CSST. The grace period is only for those who are not actively working as an asbestos consultant or site surveillance technician.

Please notify our office via U.S. Postal Service or other carrier of any changes in your mailing or work address within 15 days of the change.

Sincerely,

Jeff Ferrell
 Senior Safety Engineer

Attachment: Certification Card

cc: File

Renewal – Card Attached (Revised 06/2020)





STATE OF CALIFORNIA
DEPARTMENT OF PUBLIC HEALTH



LEAD-RELATED CONSTRUCTION CERTIFICATE

INDIVIDUAL:



Martin Alvarez

CERTIFICATE TYPE:

Lead Inspector/Assessor
Lead Project Monitor

NUMBER:

LRC-00001062
LRC-00001061

EXPIRATION DATE:

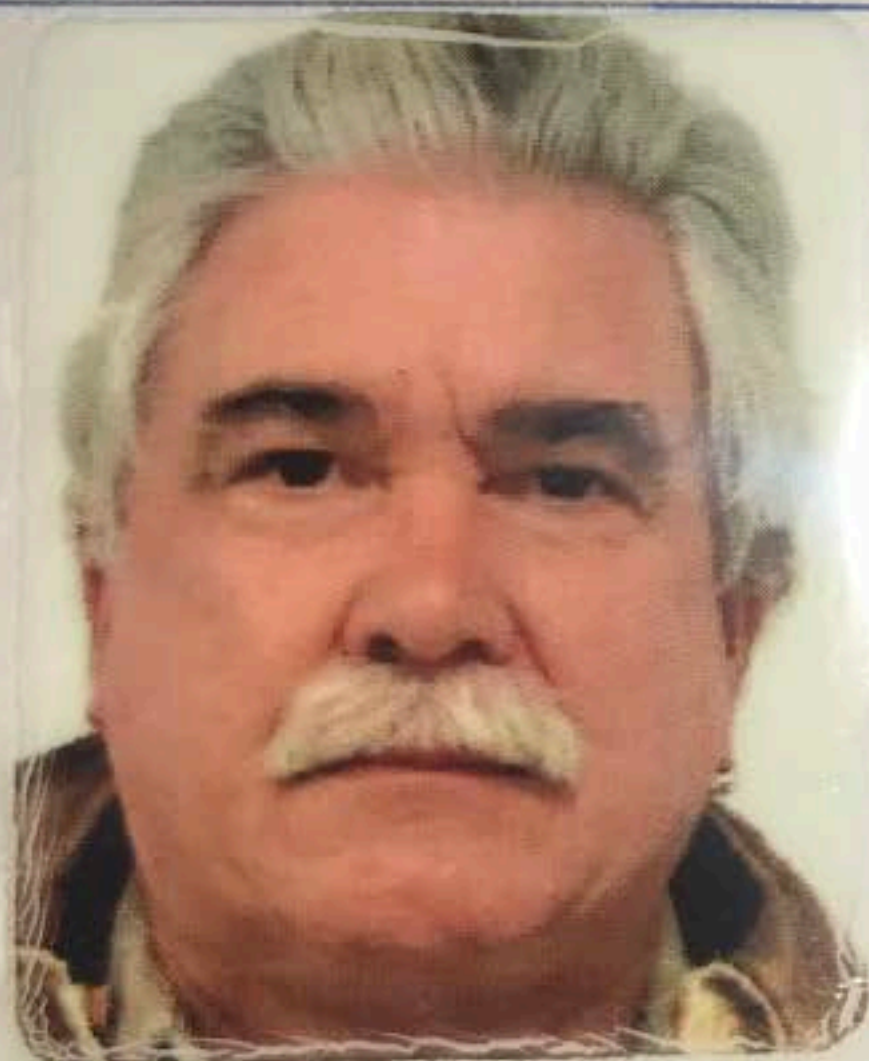
7/22/2021
7/22/2021

Disclaimer: This document alone should not be relied upon to confirm certification status. Compare the individual's photo and name to another valid form of government issued photo identification. Verify the individual's certification status by searching for Lead-Related Construction Professionals at www.cdph.ca.gov/programs/clppb or calling (800) 597-LEAD.

State of California
Division of Occupational Safety and Health
Certified Asbestos Consultant

Peter J Radzinski

Name



Certification No. **15-5571**

Expires on **02/17/22**

This certification was issued by the Division of Occupational Safety and Health as authorized by Sections 7180 et seq. of the Business and Professions Code.

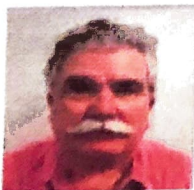


STATE OF CALIFORNIA
DEPARTMENT OF PUBLIC HEALTH



LEAD-RELATED CONSTRUCTION CERTIFICATE

INDIVIDUAL:



Peter Radzinski

CERTIFICATE TYPE:

Lead Project Monitor
Lead Sampling Technician

NUMBER:

LRC-00002185
LRC-00002184

EXPIRATION DATE:

8/7/2022
8/7/2022

Disclaimer: This document alone should not be relied upon to confirm certification status. Compare the individual's photo and name to another valid form of government issued photo identification. Verify the individual's certification status by searching for Lead-Related Construction Professionals at www.cdph.ca.gov/programs/clppb or calling (800) 597-LEAD.



STATE OF CALIFORNIA
DEPARTMENT OF PUBLIC HEALTH



LEAD-RELATED CONSTRUCTION CERTIFICATE

INDIVIDUAL:



Gary Lowe

CERTIFICATE TYPE:

Lead Inspector/Assessor
Lead Project Monitor

NUMBER:

LRC-00003464
LRC-00003463

EXPIRATION DATE:

12/7/2021
12/7/2021

Disclaimer: This document alone should not be relied upon to confirm certification status. Compare the individual's photo and name to another valid form of government issued photo identification. Verify the individual's certification status by searching for Lead-Related Construction Professionals at www.cdph.ca.gov/programs/clppb or calling (800) 597-LEAD.

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Right Perspective
Right Now**

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