

STATE OF CALIFORNIA DEPARTMENT OF GENERAL SERVICES



REAL ESTATE SERVICES DIVISION
PROJECT MANAGEMENT AND DEVELOPMENT BRANCH

PROJECT MANUAL – Book I of 3

INTRODUCTORY INFORMATION
BIDDING REQUIREMENTS
CONTRACTING REQUIREMENTS
SPECIFICATIONS

FOR:

DEMOLITION 345 ASH & 1301 STATE STREET

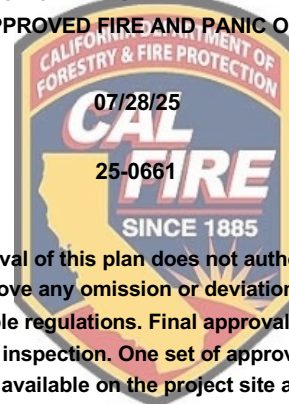
**DEPARTMENT OF HOUSING AND COMMUNITY
DEVELOPMENT**

SAN DIEGO, SAN DIEGO COUNTY, CALIFORNIA

David Keltgen, Project Director
West Sacramento, California

April 2025
00000000011927A

OFFICE OF THE STATE FIRE MARSHAL
APPROVED FIRE AND PANIC ONLY



Approval of this plan does not authorize or
approve any omission or deviation from
applicable regulations. Final approval is subject
to field inspection. One set of approved plans
shall be available on the project site at all times.

DOCUMENT 00 01 01

PROJECT TITLE PAGE

Title : DEMOLITION 345 ASH & 1301 STATE STREET

Client Agency : DEPARTMENT OF HOUSING AND
COMMUNITY DEVELOPMENT

Location : CITY OF SAN DIEGO, SAN DIEGO COUNTY,
CALIFORNIA

Project Number : 00000000011927A

Project Director : David Keltgen
State of California
Department of General Services
Real Estate Services Division
Project Management and Development Branch
707 Third Street, 4th Floor
West Sacramento, California 95605
Telephone Number: (916) 206-5604
Email: david.keltgen@dgs.ca.gov

SECTION 00 01 05

CERTIFICATIONS PAGE

PROJECT TITLE: DEMOLITION 345 ASH STREET & 1301 STATE STREET

CLIENT AGENCY: DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT

LOCATION: 345 ASH STREET AND 1301 STATE STREET
SAN DIEGO, CA 92101
SAN DIEGO COUNTY

PROJECT NUMBER: 00000000011927A

OWNER: STATE OF CALIFORNIA

PROJECT DIRECTOR : David Keltgen
Department of General Services,
Real Estate Services Division,
Project Management & Development Branch
707 Third Street, 4th Floor, Suite 4-105
West Sacramento, California 95605
916-206-5604

 3/15/25	 3/15/25	
ARCHITECT	CIVIL ENGINEER	

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STATE OF CALIFORNIA
DEPARTMENT OF GENERAL SERVICES
REAL ESTATE SERVICES DIVISION
PROJECT MANAGEMENT AND DEVELOPMENT BRANCH

DOCUMENT 00 11 00

INVITATION FOR BIDS

For Bidding by Invitation Only Pursuant to PCC § 10122(d): This project is being bid informally to select prime Contractors in accordance with Public Contract Code § 10122(d). Bid forms will be provided to bidders via email.

SEALED BIDS: DGS will receive sealed bids at 707 Third Street, West Sacramento, California 95605, **before 2:00 P.M., October 22, 2025. Bids received after this date/time will not be considered received on time.**

A public bid opening will be held on **October 23, 2025 at 2:00pm** at 707 Third Street, West Sacramento, CA 95605. Bidders may attend virtually or in person. Bidders attending the bid opening in-person will need to meet and sign in at the security guard station in the lobby at the mailing address below. At the public bid opening, all bids received before **2:00 P.M., October 22, 2025** will be opened and recorded onto a Preliminary Bid Tabulation. Bidders do not need to attend the bid opening as the Preliminary Bid Tabulation will be made available immediately after the bid opening is completed and it will be emailed to invited bidders.

The bid opening may be attended virtually via the following link:

Teams meeting link: [Join the meeting now](#)

Teams meeting ID: 212 539 773 910 9

Teams Passcode: oM3D3Pq9

HAND DELIVERED BIDS: Shall be placed in the DGS/OBAS Bid/Proposal Drop Box located in the lobby at 707 3rd Street in West Sacramento. The Drop Box will be opened at 2:00 p.m. Tuesday through Thursday and bids/proposals in the box will be certified as being received before 2:00 p.m. that day.

If mailing bids, ensure the outside of the mailing reads:

ATTENTION: DEMOLITION 345 ASH & 1301 STATE STREETS
DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
DO NOT OPEN
JANNCE CASTRO – PROJECT 00000000011927A
DEPARTMENT OF GENERAL SERVICES
OFFICE OF BUSINESS AND ACQUISITION SERVICES
707 3RD STREET, MS 508, WEST SACRAMENTO, CA 95605

The bids shall include all Work pursuant to the Drawings and Project Manual, and Addenda as may be issued prior to bid opening date.

Scope of Work: Major components of Project Work consist of abatement, demolition, right of way permits, removal of utilities to right of way, fencing, and related work.

License: Contractors' State License Classification required to bid Project is **A or B**.

Certificate of Reported Compliance (CRC) – Fleet Vehicles: As a condition of Contract award, prior

INVITATION FOR BIDS

RESDMSTR: 03/01/2025

00 11 00 - 1

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to Contract execution, Contractor shall submit copies of the valid CRCs for any fleet retained by the Contractor or any listed Subcontractor, for which any vehicles subject to the California Air Resources Board In-Use Off-Road Diesel Fueled Fleet Regulations, Section 2449(i), Title 12, California Code of Regulations, are used in the completion of the work included in the Contract.

More information on the In-Use Off-Road Diesel-Fueled Fleets Regulation can be found at the following link: <https://ww2.arb.ca.gov/our-work/programs/use-road-diesel-fueled-fleets-regulation>

Generative Artificial Intelligence (GenAI): The State of California seeks to realize the potential benefits of GenAI, through the development and deployment of GenAI tools, while balancing the risks of these new technologies.

Bidder must notify the State in writing if it: (1) intends to provide GenAI as a deliverable to the State; or (2), intends to utilize GenAI, including GenAI from third parties, to complete all or a portion of any deliverable that materially impacts: (i) functionality of a State system, (ii) risk to the State, or (iii) Contract performance. For avoidance of doubt, the term “materially impacts” shall have the meaning set forth in State Administrative Manual (SAM) § 4986.2 Definitions for GenAI.

Failure to report GenAI to the State may result in disqualification. The State reserves the right to seek any and all relief to which it may be entitled to as a result of such non-disclosure.

Upon notification by a Bidder of GenAI as required, the State reserves the right to incorporate GenAI Special Provisions into the final contract or reject bids/offers that present an unacceptable level of risk to the State.

Government Code § 11549.64 defines “Generative Artificial Intelligence (GenAI)” as an artificial intelligence system that can generate derived synthetic content, including text, images, video, and audio that emulates the structure and characteristics of the system’s training data.

Availability of Funds: Award of this contract is subject to the availability of funds through the State’s normal budget process and/or transfer of funds to the Department of General Services through the Architecture Revolving Fund.

Pre-bid Site Inspection: Bids will only be accepted from those Contractors having attended the **MANDATORY** pre-bid site inspection tour on **October 8, 2025, at 11:00 A.M.** at which time representatives of the State and prospective bidders shall meet at 345 Ash Street, San Diego, CA. The State’s requirements for Disabled Veteran Business Enterprise (DVBE) participation and other Contract requirements will be presented. Prime Contractors are encouraged to have their Key Administrator and DVBE office coordinator attend to receive this information and to have their questions answered.

Attendance for the entire inspection is required in order for bidders to be eligible to submit a bid.

Executive Order N-6-22: The Bidder must be advised of Executive Order N-6-22 Russia Sanctions. On March 4, 2022, Governor Gavin Newsom issued Executive Order (EO) N-6-22 regarding Economic Sanctions against Russia and Russian entities and individuals. “Economic Sanctions” refers to sanctions imposed by the U.S. government in response to Russia’s actions in Ukraine, as well as any sanctions imposed under state law. By submitting a bid, Bidder represents that it is not a target of Economic Sanctions. Should the State determine Bidder is a target of Economic Sanctions or is conducting prohibited transactions with sanctioned individuals or entities, that shall be grounds for rejection of the Bidder’s bid any time prior to contract execution, or, if determined after contract execution, shall be grounds for termination by the State.

Bid: Submit on Lump Sum basis.

DVBE: Participation in Disabled Veterans Business Enterprises (DVBE) program **may** be required for this project. Refer to Project Manual Document 00 21 00, Project Manual Document 00 22 10 and Bid

Forms for requirements. Bidders are advised to commence the required DVBE procedures immediately upon receipt of drawings and project manual.

DVBE Bid Incentive: The DVBE Incentive program is being applied on this project. Refer to Project Manual Document 00 21 00, Article 18.5.

Small Business Preference: Refer to Project Manual Document 00 21 00, Article 5.5

Non-Small Business Subcontractor Preference: Refer to Project Manual Document 00 21 00, Article 5.6

Bonds: Successful bidder shall furnish payment and performance bonds, each in the amount of 100 percent of the Contract price.

Non-Discrimination Program (Government Code § 12990): Refer to Project Manual Document 00 72 00, General Conditions of the Contract for Construction.

Labor Code: Pursuant to Labor Code § 1774, the Contractor to whom the contract is awarded, and any subcontractor under him, shall pay not less than the specified general prevailing rates of per diem to all workers employed in the execution of the contract. Pursuant to Labor Code § 1770 et seq., the Department of Industrial Relations (DIR) has ascertained general prevailing rate of per diem wages in the locality in which the work is to be performed. Copies of the general prevailing rate of per diem wages are available from the Department of Industrial Relations, Labor Statistics & Research Division, P.O. Box 420603, San Francisco, CA 94142, (415) 703-4780; or general prevailing rate of per diem may be accessed on the internet at Department of Industrial Relations website (<https://www.dir.ca.gov>) for the August 2025 published general prevailing rate of per diem wages for this contract. Copies of the general prevailing rate of per diem wages are on file at DGS' principal office, which shall be made available to any interested party on request. Note that when the general prevailing rate of per diem determination shows an expiration date (noted by a double asterisk**), to expire during the term of the contract, the Contractor must call or write the DIR to obtain the new rates and incorporate them in this contract for submittal of bid. The Contractor is responsible to comply with the Labor Code Sections and general prevailing rate of per diem determinations, including all the guidelines and the fine print in the general prevailing rate of per diem determinations. Refer to Project Manual Document 00 72 00, General Conditions of the Contract for Construction.

Labor Compliance Monitoring and Enforcement: This project is subject to monitoring and enforcement by the Department of Industrial Relations (DIR), Compliance Monitoring Unit. All Contractors and subcontractors, regardless of tier, shall be required to comply with the Monitoring and Enforcement Program, including, but not limited to, contractor registration, submittal of electronic certified payroll reports directly to the DIR as applicable and cooperation with on-site monitoring by DIR personnel. Refer to Labor Code § 1771.4 et seq. and the General Conditions of the Contract for Construction, Document 00 72 00, Article 3.3.3 for more information.

END OF DOCUMENT

STATE OF CALIFORNIA
DEPARTMENT OF GENERAL SERVICES
REAL ESTATE SERVICES DIVISION

DOCUMENT 00 21 00

INSTRUCTIONS TO BIDDERS

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DOCUMENT 00 21 00
INSTRUCTIONS TO BIDDERS

1. GENERAL

- 1.1 Bidder shall examine these instructions carefully and be responsive to conditions with which must be complied with prior to bid.
- 1.2 Bidders shall be aware of the requirements of codes referenced in the Bidding Requirements and in the Contract Documents. Bidders may access codes included in California law through publications or through the Internet. The web site for California law is: <http://leginfo.legislature.ca.gov/faces/codes.xhtml>.

2. COMPETENCE OF BIDDERS

2.1 License:

- .1 Bidder may only bid on work for which Bidder is properly licensed by the Contractors' State License Board.
- .2 Joint venture Bidders must possess a joint venture license. Each party to a joint venture shall be properly licensed for the Work of this Project.

- 2.2 Prior Disqualification: Public Contract Code Section 10162 provides that a bid may be rejected on the basis of a Bidder, any officer of such Bidder, or any employee of such Bidder who has a proprietary interest in such Bidder, having been disqualified, removed or otherwise prevented from bidding on, or completing a Federal, State or Local project because of a violation of a law or a safety regulation.

If the answer to the questionnaire included in the Bid Form is "yes" the Department will review the circumstances presented and if the Director deems acceptance of the bid is not in the best interest of the State, bid may be rejected.

- 2.3 Employment of Undocumented Aliens: Pursuant to Section 6101 of the Public Contract Code, the State may not award a public works contract to a bidder or contractor, nor shall a bidder or contractor be eligible to bid for or receive a public works contract, who has, in the preceding five years, been convicted of violating a state or federal law respecting the employment of undocumented aliens.

2.4 Contractor Registration:

- .1 Pursuant to Sections 1725.5 and 1771.1 of the Labor Code, all contractors and subcontractors must be currently registered with the Department of Industrial Relations in order to qualify to bid on; be listed in a bid proposal, subject to the requirements of Section 4104 of the Public Contract Code; or engage in the performance of any contract for public work.
- .2 Limited exceptions for Joint Venture Bidders and Projects with Federal Funds may apply pursuant to Section 1771.1 of the Labor Code.

- 2.5 Ineligible Subcontractors: Pursuant to Section 1777.1 or 1777.7 of the Labor Code, a contractor is prohibited from bidding on, being awarded or performing work on a public works project with a subcontractor who is ineligible to perform work on the public works project. Refer to the General Conditions of the Contract for Construction, Article 4.1.3.

- 2.6 Asbestos Abatement Certification: If Contractor performs the asbestos abatement work; Contractor must be certified for asbestos abatement work by the Contractors' State License Board. If Contractor subcontracts the asbestos abatement work, Contractor need not be certified for asbestos abatement, but the subcontractor must be certified by the Contractor's State License Board.
- 2.7 Hazardous Substance Removal Certification: If Contractor performs the hazardous substance removal work or remedial action; Contractor must be certified for hazardous substance removal work by the Contractors' State License Board. If Contractor subcontracts the hazardous substance removal work or remedial action, Contractor need not be certified for hazardous substance removal, but the subcontractor must be certified by the Contractor's State License Board.

3. EXAMINATION OF BID DOCUMENTS AND SITE

3.1 Bidder's Responsibility:

- .1 Bidder shall carefully examine the Work site, Drawings, and Specifications (contract documents). This includes reference only documents that will not be part of the agreement, but are provided in addition to documents that will be part of the agreement. See the Office of State Publishing Plan Room <https://www.ospplanroom.com/> (Details tab, Documents folder) for reference only documents.
- .2 By submitting a bid, Bidder acknowledges that the Bidder understands the character, quality and quantity of surface, locations of utilities, subsurface materials, or obstacles to be encountered; insofar as this information is reasonably ascertainable from inspection of the Work site, Drawings, and Specifications.
- .3 Bidder's examination shall include all exploratory work done by the State, as well as information presented in the Drawings, Specifications, and other documents as available.

3.2 Refer to Document 00 11 00, Invitation to Bid, for availability of bidding documents.

3.3 Failure by Bidder to acquaint itself with available information will not relieve Bidder from responsibility for estimating properly the difficulty or cost of successfully performing the Work.

3.4 In connection with the foregoing, Bidder's attention is invited to Paragraphs 3.1 and 9.1 of Document 00 72 00, General Conditions of the Contract for Construction.

4. DISCREPANCIES, CONFLICTS, OMISSIONS, OR ERRORS

- 4.1 If discrepancies, conflicts, omissions or errors are found in the Drawings and the Project Manual prior to the date of bid opening, Bidder shall request clarification from the State's Representative identified in the Project Manual. Bidder shall submit request on Request for Bidding Interpretation Form, Appendix 00 21 00.1.
- 4.2 Clarifications will be given only in the form of Addenda to all Bidders.
- 4.3 If no Addenda are issued related to supposed discrepancy, conflict, omissions or errors in figuring the Work, Bidders shall consider that discrepancies, conflicts, or omission between Drawings and Specifications shall be governed by Paragraph 1.5 of Document 00 72 00, General Conditions of the Contract for Construction.

- 4.4 Omission of an item in either the Specifications or Drawings does not create a discrepancy or conflict.

5. BIDDING DOCUMENTS

- 5.1 Bid Form: All bids must be on the forms provided by the Department of General Services. Bid not on the forms provided will be considered nonresponsive.

5.2 Completing the Bid Form:

- .1 Bidder's name should be the same as listed on Bidder's license.
- .2 Price(s) shall be in the manner required by the Bid Form.
- .3 Bid Form shall be signed by Bidder or duly authorized representative.
 - 1) If Bidder is an individual, name must be shown.
 - 2) If Bidder is a partnership, name of the partnership must be shown and one or more partners shall sign the Bid Form.
 - 3) If Bidder is a corporation, name of the corporation must be shown, the state of incorporation must be listed, the title of the signor must be shown, and the corporate seal must be used.
 - 4) Bidder business and mailing address should be shown.

5.3 Required Listing of Proposed Subcontractors:

- .1 Failure to list kind of Work, Name, or Location shall cause the bid to be rejected as non-responsive.
- .2 Bidders' attention is directed to other provisions of the Subletting and Subcontracting Fair Practices Act, beginning with Public Contract Code Section 4100, related to penalties for failure to comply with the Act by using unauthorized subcontractors or by making unauthorized substitutions. See General Conditions of the Contract for Construction, Paragraph 1.1, for definition of subcontractor, and Article 4 for further reference to subcontractors.
- .3 Bidder's attention is directed to Labor Code Section 1771.1, relating to inadvertent errors in the listing of subcontractors not currently registered with the Department of Industrial Relations.

5.4 Bidders Security:

- .1 All bids shall be accompanied by the following forms of bidder's security: Bidder's Bond, cashier's check, certified check or cash. Bidder's Bond shall be executed by an admitted surety insurer, authorized to issue surety bonds in the State of California. Bond and checks shall be made payable to the director of the Department of General Services. The security shall be in an amount equal to at least 10 percent of the amount bid. A bid shall not be considered responsive unless one of the forms of bidder's security is enclosed with it.
- .2 If Bidder's security is a Bidder's Bond, it must be executed on the form attached to the Bid Form.

5.5 Small Business:

- .1 A five percent (5%) small business preference will be granted to Bidders certified as "Small Business" in accordance with Section 1896 et. Seq., Title 2, California Code of Regulations.

- .2 If the Bidder is not already a Certified Small Business, applications for certification as "Small Business" must be submitted to the Office of Small Business and DVBE Certification (OSDS), 707 3rd Street, First Floor, Suite 1-400, West Sacramento, CA 95605; <https://www.dgs.ca.gov/PD/About/Page-Content/PD-Branch-Intro-Accordion-List/Office-of-Small-Business-and-Disabled-Veteran-Business-Enterprise/Certification-Program>. Firms can apply for small business certification online at <https://www.dgs.ca.gov/PD/Services/Page-Content/Procurement-Division-Services-List-Folder/Certify-or-Re-apply-as-Small-Business-Disabled-Veteran-Business-Enterprise>.
- .3 Submit a copy of your OSDS certification letter with the Bid Form.
- .4 Pursuant to Section 1896.14, in order to receive the small business preference, bidders must have a completed application (including proof of annual receipts) on file with the OSDS. The bidder must have requested a preference from OSDS and meet all applicable requirements under the subchapter and the State Small Business Procurement and Contract Act, (including but not limited to evidence to rebut presumptions) not later than five o'clock (5:00 p.m.) on the date on which the subject bid is opened.

5.6 Non-Small Business:

- .1 The application of the five percent (5%) small business bidding preference is now extended to a bidder, whose business is not certified as a small business but commits to subcontracting at least twenty-five percent (25%) of its net bid price to businesses that are California certified small businesses and/or microbusinesses.

When applicable this preference will be granted when the non-small business:

- Has been determined to be a responsible bidder and submitted a timely responsive bid.
- Completes Document 00 43 16-2 list of California Certified Small Businesses that he/she commits to subcontract with for a commercially useful function in the performance of the project and submits this document no later than forty-eight (48) hours after the time of receipt of bids. Ascertain that the Bidder's Name and project Work Order number are noted.
If bidder fails to submit a properly completed Document 00 43 16-2 within 48 hours after the time of receipt of bids, the claim for non-small business preference will be denied.

Submit completed Document 00 43 16-2 to Department of General Services, Administration Division, Office of Business and Acquisition Services, Contract Management Section, 707 3rd Street, Suite 2-300, West Sacramento, CA 95605 or by fax to (916) 376-1778.

6. SUBMISSION OF BID FORMS

- 6.1 It is the sole responsibility of the Bidder to see that its bid is received in proper time. Bid received after scheduled closing time for receipt of bids will be returned to Bidder unopened.
- 6.2 Bid Forms shall be submitted under sealed cover, plainly identified as a bid for the work of the Project being bid upon and addressed as directed in the Invitation to Bid and the Bid Form. Failure to do so may result in a premature opening of, or failure to open such bid. Bid Forms improperly marked may be disregarded.

7. WITHDRAWAL OF BID FORMS

- 7.1 Bids may be withdrawn prior to the time fixed in the public notice for opening of bids, provided that

a request in writing, executed by Bidder or Bidder's authorized representative, for withdrawal of such bid is filed with the Administration Division, Office of Business and Acquisition Services, Contract Management Section, or the Director of General Services at the location of the bid opening. Oral, facsimile, electronic, telegraphic, or telephonic request to withdraw the Bid Form is not acceptable. Withdrawal of a bid shall not prejudice the right of a Bidder to file a new bid.

- 7.2 This article does not authorize withdrawal of any bid after the time fixed in the Invitation to Bid for opening of bids.

8. PUBLIC OPENING OF BIDS

Bids will be publicly opened and read at time and place indicated in Invitation to Bid. Bidders or their authorized agents are invited to be present.

9. REJECTION OF IRREGULAR BIDS

- 9.1 Bids may be rejected if they show any alterations of form, additions not called for, conditional bids, incomplete bids, erasures, or irregularities of any kind. If bid amount is changed after the amount is originally inserted, the change must be initialed.
- 9.2 When Bid Form is signed by an agent, other than the officer or officers of a corporation authorized to sign contracts on its behalf, or are signed by an agent other than a partner of a partnership, or by an agent for an individual, a power of attorney must be on file with the Department of General Services prior to opening bids or shall be submitted with the Bid Form; otherwise the bid will be rejected as irregular and unauthorized.

10. COMPETITIVE BIDDING

- 10.1 If more than one Bid Form is offered by an individual, firm, partnership, corporation, association, or any combination thereof, under the same or different names, all such Bid Forms may be rejected. A party who has quoted prices on materials or work to a Bidder is not thereby disqualified from quoting prices to other Bidders, or from submitting a bid directly for materials or work.
- 10.2 Bidders are put on notice that any collusive agreement fixing the prices to be bid so as to control or affect awarding of the Contract is in violation of competitive bidding requirements of the State Contract Act and may render void any Contract let under such circumstances.

11. AWARD OF CONTRACT

- 11.1 The right is reserved to reject any and all bids and waive any irregularity in any bid received.
- 11.2 Award of the Contract, if awarded, will be to the lowest responsible Bidder whose Bid Form complies with all requirements prescribed.
- .1 Such award, if made, will be made within 45 days after opening of bids.
- .2 If lowest responsible Bidder refuses or fails to execute the Contract, the Director of General Services may award the Contract to the second lowest responsible Bidder. Such award, if made, will be made within 60 days after opening of bids.
- .3 If second lowest responsible Bidder refuses or fails to execute the Contract, the Director of General Services may award the Contract to the third lowest responsible Bidder. Such award if made, will be made within 75 days after opening of bids.

- 11.3 The above time periods within which award of Contract may be made are subject to extension of such further period as may be agreed upon in writing between the Department of General Services and the Bidder concerned.
- 11.4 When Project is segregated into more than one prime Contract, and a Bidder upon one of the prime Contracts fail or refuses to execute the Contract, then the time for award of such Contract will be extended as provided by this Article, and the time for award of each of the other segregated prime Contracts will be extended by an equivalent length of time, if required.

12. SUBSTITUTION OF ALTERNATIVE MATERIALS, ARTICLES, OR EQUIPMENT

- 12.1 Pursuant to Public Contract Code Section 3400, alternative material(s), article(s), or equipment that are of equal quality and of required characteristics for the purpose intended may be proposed during the bidding period; for use in the Work, provided the Bidder complies with the following requirements:
- .1 Proposals for alternative material(s), article(s), or equipment, requested during the bidding period, shall be submitted in writing, not later than the deadline date and time identified on the Request for Bidding Interpretation (RFBI), Appendix 00 21 00.1.
 - .2 The proposal will not be considered unless the submittal is accompanied by complete information and descriptive data necessary to determine equality of offered material(s), article(s) or equipment. Samples shall be provided when requested by the State. Burden of proof as to comparative quality, suitability, and performance of offered material(s), article(s), or equipment shall be upon the Bidder submitting the proposal. The State will be the sole judge as to such matters. In the event the State rejects the use of such alternative(s) submitted, then one of the particular products originally specified in the Contract Documents shall be furnished. If the proposal is accepted, all Bidders will be notified by Addendum.
 - .3 Refer to the General Conditions of the Contract for Construction, Clauses 2.2.7 and 3.12.10, for substitution requests after Contract Award.

13. RETURN OF BIDDER'S SECURITY

- 13.1 Within 10 days after the award of the Contract, the Department of General Services will return all Bidder's security, other than Bidder's Bonds, accompanying the Bid Forms that are not to be fully considered in making the award.
- 13.2 Retained Bidder's security will be held until the Contract has been fully executed, after which all Bidder's security, except Bidder's Bonds, will be returned.

14. CONTRACT BONDS

Contractor will be required to furnish in duplicate the Performance Bond and Payment Bond required by the State Contract Act, each in the amount of 100 percent of the Contract amount; as set forth in Paragraph 11.3 of Document 00 72 00, General Conditions of the Contract for Construction.

15. INSURANCE

Contractor will be required to furnish to the State, concurrently with execution of the Contract, a certificate of insurance coverage as required by Paragraph 11.1 of Document 00 72 00, General Conditions of the Contract for Construction.

16. EXECUTION OF CONTRACT

16.1 Contract shall be signed by successful Bidder and returned within 7 days of receipt. The Contract shall not be binding upon the State until it is executed by the Contractor and the State. Contract Documents required for execution of the Contract consist of the following:

- .1 Agreement, Document 00 52 00.
- .2 Contract Bonds.
- .3 Certificate of Insurance.
- .4 Signed set of Drawings and Project Manual for filing with the Contract.

16.2 Should Contractor begin work in advance of receiving notice that the Contract has been approved, any work performed in advance of the date of approval shall be considered as having been done at risk as a volunteer. In no event shall Contractor commence work until Contractor has received notification from the State that the certificate of insurance has been approved.

17. FAILURE TO EXECUTE CONTRACT

Failure to execute Contract within 7 days after successful Bidder has received Contract for execution may be cause for forfeiture of Bidder's security. Failure to provide required bonds and insurance constitutes failure to execute Contract.

18. PARTICIPATION IN DISABLED VETERANS BUSINESS ENTERPRISES (DVBE) PROGRAM

18.1 Pursuant to Section 10115 et seq. of the Public Contract Code, and Section 999 et seq. of the Military and Veterans Code, the Department of General Services has established an overall goal of not less than 3% participation by Disabled Veteran Business Enterprises (DVBE). However, these DVBE Participation Requirements may be modified for this project; reference Document 00 22 10 of the Project Manual for the percentage requirements.

18.2 Bids will only be accepted from those Bidders that certify that they have achieved the required participation, as outlined in Document 00 22 10 of the Project Manual, and as set forth in the Bid Form.

18.3 Applicants for DVBE certification may apply online at <https://www.dgs.ca.gov/PD/Services/Page-Content/Procurement-Division-Services-List-Folder/Certify-or-Re-apply-as-Small-Business-Disabled-Veteran-Business-Enterprise>. DVBE applicants must submit specific support documentation to the OSDS.

18.4 Bidder's attention is directed to the requirement that certifications and documentation must be submitted with the bid; otherwise bids will be considered non-responsive.

BIDDERS ARE ADVISED TO COMMENCE THE REQUIRED DVBE PROCEDURES IMMEDIATELY UPON RECEIPT OF DRAWINGS AND SPECIFICATIONS, OR NOT LESS THAN THREE (3) WEEKS PRIOR TO THE BID OPENING, WHICHEVER OCCURS FIRST.

18.5 DVBE INCENTIVE

- .1 A DVBE Incentive will be granted to Bidders in accordance with Section 999.5(a) and (d) of the Military and Veterans Code and California Code of Regulations 1896.98 et seq.
- .2 The DVBE Incentive will be applied during the bid evaluation process and will only be applied to responsive bids from responsible bidders proposing the percentage(s) of DVBE Participation

for the DVBE Incentive specified in the solicitation. Any Small Business Preference must be calculated prior to the DVBE Incentive calculation and evaluation.

- .3 The incentive will be applied when a Bidder's DVBE Participation exceeds 3% the DVBE Mandatory participation Requirement, in an attempt to displace the apparent low bidder.

The DVBE Incentive is as follows:

Confirmed DVBE Participation	Incentive
7% and above	5%
6% to 6.99%	4%
5% to 5.99%	3%
4% to 4.99%	2%
3.01% to 3.99%	1%
0% -3%	No incentive – minimum 3% participation required

- .4 The percentage of DVBE Incentive will not exceed 5% and will not exceed \$500,000.00.
- .5 For every bidder qualifying for the DVBE incentive, the amount (dollar value) of the incentive is computed using the qualifying bidder's percentage of DVBE incentive and the lowest responsive and responsible bid price. Calculations to determine adjusted bid price are for consideration only. Bids will be awarded for the actual bid amount as verified by the State.
- .6 A certified Small Business may only be displaced by another certified Small Business with a higher percentage of DVBE participation and a lower adjusted bid price.
- 1) A certified Small Business shall not be displaced by a non-small business.
 - 2) When applying the DVBE Incentive program, bidders claiming the "Non-Certified Small Business preference" are considered a non-small business.

19. CERTIFICATE OF REPORTED COMPLIANCE – FLEET VEHICLES

- 19.1 For any project using vehicles subject to the California Air Resources Board In-Use Off-Road Diesel Fueled Fleets Regulation, Section 2449(i), Title 12, California Code of Regulations, prior to the execution of a contract, Contractor shall be required to submit copies of the valid Certificates of Reported Compliance (CRC), issued by the California Air Resources Board. CRCs shall be provided for any fleet used by the Contractor or any listed Subcontractors.
- 19.2 CRCs are required for any contract involving the operation of self-propelled off-road diesel vehicles 25 horsepower or greater and most two-engine vehicles owned and operated in California, including vehicles that are rented or leased.
- 19.3 Certificates of Reported Compliance must be retained by the Contractor for three years after the completion of the project.
- 19.4 If no vehicles subject to the California Air Resources Board In-Use Off-Road Diesel Fueled Fleets Regulation shall be used on a project by the Contractor or any Subcontractor, Contractor shall provide a certification that no vehicles subject to these regulations will be used on the project.

END OF DOCUMENT

REQUEST FOR BIDDING INTERPRETATION (RFBI)

(Email no later than October 15, 2025, 5:00 p.m.)

To: David Keltgen
Project Management and Development Branch
Real Estate Services Division
Phone: 916-206-5604

Email: david.keltgen@dgs.ca.gov

PMDB RFBI No.: _____
Requestor RFBI No.: _____
Request Date: _____
From (Bidder): _____

Contact: _____
Phone: _____
Fax: _____
Email: _____

All RFBI's received prior to deadline identified above, and responses from the State will be published on <http://www.caleprocure.ca.gov>. Click on "Start Search." In the event name field, enter the project number and click search. While viewing the Event Details, click on "View Event Package" to view RFBI responses.

Project No.: 00000000011927A
Project Name: Demolition 345 Ash & 1301 State Street
Location: San Diego, CA

Drawing Reference: _____ Project Manual Reference: _____

Question:

Bidder's Authorized Signature: _____

[] Check here if additional pages attached

Page 1 of _____

SUPPLEMENTARY INSTRUCTIONS TO BIDDERS

The following requirements supplement Document 00 21 00, Instructions to Bidders:

1. PAYEE DATA RECORD

Add the following to Subarticle 6.2:

Bidders are requested to complete and return the State's Payee Data Record form, Std.204 (and Std. 205 if applicable), included with the Bid Forms. The Payee Data Record form is required in lieu of IRS W-9 when doing business with the State of California, and will be used by the State to prepare tax information returns as stated on the form.

- .1 Completion and submission of the form with the Bid Forms will expedite processing of the Award of Contract.
- .2 Failure to submit the completed form with the Bid will not be cause for rejection of a Bid.
- .3 Forms of all Bidders will be kept on file by the State for use in future awarded Contracts.
- .4 Bidders who have a completed and current Payee Data Record form on file with the Department of General Services, Real Estate Services Division, Contracts Section, may so state on the form and will not be required to submit a duplicate form.
- .5 The form is subject to Section 7(b) of the Privacy Act of 1974 (Public Law 93-5791). Refer to the Privacy Statement on the back of the form.

2. AWARD OF CONTRACT

Pursuant to Article 11 of Document 00 21 00, Instructions to Bidders, award of Contract, if awarded, will be made within 60 days, in lieu of 45 days as specified. Award period for second and third lowest responsible bidders will similarly be extended 15 days each.

END OF DOCUMENT

**DISABLED VETERAN BUSINESS ENTERPRISE PARTICIPATION
PROGRAM REQUIREMENTS**

Public Contract Code Section 10115 establishes a contract participation goal of at least three percent (3%) for Disabled Veteran Business Enterprise (DVBE) for State agencies.

DVBE participation is required for this contract. Mandatory participation has been set at 3%. Participation above and beyond the requirement is strongly encouraged. This bid package provides information for the DVBE Participation Program. Bidders must meet DVBE Participation Program requirements to be viewed as a responsive bidder and considered for contract award.

PLEASE READ THESE INSTRUCTIONS CAREFULLY

Bidders must fully comply with DVBE Participation Program requirements. Bidders that do not submit a complete response may find their bid determined to be non-responsive and the bid rejected.

For assistance with meeting the DVBE participation program requirements, please contact:

Department of General Services
Administrative Division
Office of Business and Acquisition Services
Contract Services Section – SB-DVBE Advocate
707 Third Street, MS 508
West Sacramento, CA 95605
Email: OBASAdvocate@dgs.ca.gov

The **Office of Small Business and DVBE Services** (OSDS) offers program information and may be reached at:

Department of General Services
Office of Small Business and DVBE Services (OSDS)
707 3RD Street, 1st Floor, Room 400
West Sacramento, CA 95605-2811

Homepage: [Apply for or Re-Apply for Certification as a Small Business and/or Disabled Veteran Business Enterprise](#)

Receptionist: (916) 375-4940
FAX: (916) 375-4950
Email: OSDSHelp@dgs.ca.gov

Mailing Address:
Office of Small Business and DVBE Services (OSDS)
Room 1-400, MS 210
P.O. Box 989052
West Sacramento, CA 95798-9052

INSTRUCTIONS FOR DVBE PARTICIPATION PROGRAM COMPLIANCE OPTIONS

If for any reason you fail to meet the DVBE Participation Requirement for this bid, your bid will be considered non-responsive.

Meet or exceed the DVBE participation requirements for the proposed contract by one of the following two (2) ways:

1. **DVBE Bidder** - If you are a DVBE bidder, agree to perform the required percentage of the contract bid amount or value with your firm or in combination with other DVBE firms. You **must** write that commitment on Article 9.2 of the Bid Form, Document 00 41 00. Instructions on how to complete this document are on that page.
2. **Non-DVBE Bidder** - If you are a non-DVBE bidder, agree to use other firms for at least the required percentage of the contract bid amount or value. You **must** write that commitment on Article 9.2 of the Bid Form, Document 00 41 00. Instructions on how to complete this document are on that page.

DVBE Certification: OSDS-DVBE certification is the only acceptable certification. To verify if a contractor is certified refer to the Cal eProcure web-site at [The State of California Certifications](#). Bidders must provide certification verification for each participating DVBE bidder, subcontractor, and/or supplier. Applicants for DVBE certification may apply online at [Apply for or Re-Apply for Certification as a Small Business and/or Disabled Veteran Business Enterprise](#). DVBE applicants must submit specific support documentation to the OSDS.

DVBE Bid Incentive: A DVBE Incentive will be granted to Bidders who have achieved DVBE participation exceeding 3% or greater of the value of the bid in accordance with Section 999.5(a) and (d) of the Military and Veterans Code and California Code of Regulations 1896.98 et seq. Refer to Project Manual Document 00 21 00, Article 18.5.

Pursuant to Military and Veterans Code §999.7, the awarding department shall withhold, on a contract entered into on or after January 1, 2021, ten thousand dollars (\$10,000) from the final payment, or the full final payment if less than ten thousand dollars (\$10,000), until a prime contractor complies with the certification requirements of subdivision (d) of Section Military and Veterans Code §999.5. A prime contractor that fails to comply with the certification requirement shall, after notice, be allowed to cure the defect. Notwithstanding any other law, if, after at least 15 calendar days but not more than 30 calendar days from the date of notice, the prime contractor refuses to comply with the certification requirements, the awarding department shall permanently deduct ten thousand dollars (\$10,000) from the final payment, or the full payment if less than ten thousand dollars (\$10,000).

ANSWERS TO FREQUENTLY ASKED QUESTIONS:

The following questions are among the most frequently asked regarding DVBE requirements:

Q: *If I am awarded the contract, am I required to use the subcontractor/supplier proposed in my bid?*

A: Yes, unless you have requested and received approval from the State for substitution. Written requests should include the person's or firm's name to be substituted, the substitution reason, the reason a non-DVBE subcontractor is proposed, if applicable and describe the business to be substituted including its business status as a sole proprietorship, partnership, corporation or other entity and the certification status of the firm, if any. See Title 2, California Code of Regulations, Section 1896.64 (c) & (d) for substitution criteria.

The request and the State's approval or disapproval is not construed as an excuse for non-compliance with any other provision of the law, including but not limited to the Subletting and Subcontracting Fair Practices Act, or any other contract requirements relating to substitution of subcontractors. Failure to adhere to at least the DVBE participation proposed by the successful Contractor may be cause for contract termination and recovery of damages under the rights and remedies due the State for default section of the contract(s) and any other penalties provided for by statute.

Q: *Who notifies the subcontractor when an award is made?*

A: Upon award to a prime Contractor, the Awarding Department notifies listed subcontractors of their contract participation. Primes are encouraged to notify their listed subcontractors immediately after an award is made to formalize their business agreements.

Q: *What happens to bids considered non-responsive to the DVBE Participation Program requirements?*

A: Non-responsive bids are subject to rejection. Many are rejected because of:

- Incomplete documentation
- Documentation not received by bid due date
- Mathematical error related to the percentages

Q: *If I am a disabled veteran business enterprise, can I meet the percentage requirements as a single company?*

A: Yes.

Q: *If my submitted bid meets the contract goal and the State decides to make multiple awards to the bid/contract, could my bid be considered non-responsive?*

A: No. The State's decision to make multiple awards will not jeopardize bid compliance.

END OF DOCUMENT

BID FORM

THE STATE OF CALIFORNIA
DEPARTMENT OF GENERAL SERVICES
REAL ESTATE SERVICES DIVISION
PROJECT MANAGEMENT AND DEVELOPMENT BRANCH

FROM: _____
(Name of Bidding Firm)

DELIVER TO: Office of Business and Acquisition Services
707 Third Street
West Sacramento, CA 95605

BEFORE 2:00 P.M., October 23, 2025

FOR: DEMOLITION 345 ASH & 1301 STATE STREET
DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
CITY OF SAN DIEGO, SAN DIEGO COUNTY, CALIFORNIA
00000000011927A

Plainly mark outside of envelope with "Bid For"; followed by the above title and Project Number.

The undersigned hereby proposes and agrees to furnish all labor, materials, and equipment, and to perform all work required for the above-named Project in the manner and time prescribed in the Drawings and Project Manual, dated April 2025 and such addenda thereto as may be issued prior to bid opening date and in accordance with prevailing wage rates ascertained by the Department of Industrial Relations and set forth on the DIR web site ([Prevailing Wage Requirements](#)) for General Prevailing Wage Rates as determined by the August 2025 DIR prevailing wage published rates. The Bid Price, set forth below in clear legible figures, includes the cost of Bonds, insurance, sales tax, and every other item of expense, direct or indirect, incidental to the Bid Price.

COMPLETE WORK

For the Lump Sum of: \$ _____

IMPORTANT - READ BEFORE SIGNING: Bid Form must be executed in same name-style in which the bidder is licensed. Bidder bidding jointly or as a combination of several business organizations is specially cautioned that such bidder must be jointly licensed in the same form and style in which the bid is executed. If making a bid as a joint venture, each person submitting the bid shall provide the information required below with respect to his or her licensure. The undersigned Bidder certifies and agrees to provide the information and comply with the requirements contained in Articles 1 through 10 on the following pages of the Bid Form. By signing, Bidder swears under penalty of perjury that the conditions of Article 2; Article 4, Paragraph 4.2; Article 7 and Article 9, Paragraph 9.2.1 are true.

Legal Name of Bidder: _____ Federal I.D. No.: _____

Contractor's License No.: _____ License Expiration Date: _____ License Classification: _____

Contractor's Public Works Registration No. (Dept. of Industrial Relations): _____

Contractor's DGS Small Business/DVBE Certification Number: _____

Business Address: _____
(Street and/or P.O. Box) (City) (State) (Zip)

E-Mail Address: _____

Business Telephone No.: _____ Facsimile No.: _____

SIGN HERE ----->

Signature of Bidder

Print Name and Title of Bidder

Executed this _____ day of _____, 20____ at _____, California.

ARTICLE 1 – BIDDER'S BUSINESS IDENTIFICATION

THIS BID IS SUBMITTED BY (check one):

☐

Individual

☐

Partnership

☐

Joint Venture

☐

Corporation

State in which Incorporated

NOTE: If Bidder is a corporation, the State in which incorporated shall be inserted above and the legal name of the corporation shall be set forth on Page 1, together with the signature of the officer or officers authorized to sign contracts on behalf of the corporation; if Bidder is a partnership, the true name of the firm shall be set forth on Page 1, together with the signature of a partner authorized to sign contract in behalf of the partnership; and if Bidder is an individual, that person's signature shall be placed on Page 1. If signature is by an agent, other than an officer of a corporation or a member of a partnership, a Power of Attorney must be on file with the Department prior to opening bids or submitted with the bid; otherwise, the bid will be regarded as irregular and unauthorized. If bid is submitted by partnership or joint venture, the members are:

ARTICLE 2 – PREFERENCES AND INCENTIVES

2.1 Small Business Preference - By checking "yes" below, Bidder requests preference as a "Small Business" and further certifies under penalty of perjury, that the firm still meets the requirements of Section 1896 et. seq. Title 2, of the California Code of Regulations, and has either: 1) been approved by the Office of Small Business and Disabled Veteran Business Enterprise (DVBE) Services (OSDS) or; 2) submitted a complete application pursuant to Section 1896.14 to the OSDS by 5:00 p.m. on the bid opening date.

The Legal Name of Bidder and the Bidder's OSDS Certification must be executed in the same name-style in which bidder is licensed. A Bidder bidding jointly or as a combination of several business organizations is specially cautioned that such bidder must be jointly licensed in same form and style in which the bid is executed.

Special attention is directed to Section 1896.16 for penalties for furnishing incorrect supporting information in obtaining preference.

2.1.1 Small Business Preference Claimed? ☐ Yes _____ ☐ No
(List date filed if not yet certified)

2.2 Non-Small Business Subcontractor Preference - By checking "yes" below Bidder requests preference as a Non-Small Business and agrees to complete and submit Document 00 43 16-2 attached hereto, no later than forty-eight (48) hours after the time of receipt of bids (or the following business day if a weekend or state holiday). Special attention is directed to Section 1896.16 for penalties for furnishing incorrect supporting information in obtaining preference.

2.2.1 Non-Small Business Subcontractor Preference Claimed? ☐ Yes ☐ No

2.3 Disabled Veteran Business Enterprise Bid Incentive - By checking "yes" below, Bidder certifies and claims credit for achieving 1% or greater of DVBE Participation on this bid as is shown in Article 9 of this bid form and also requests that the corresponding DVBE Incentive be applied to this bid.

2.3.1 DVBE Incentive Claimed? ☐ Yes ☐ No

ARTICLE 3 – BONDING ASSISTANCE

In the event Bidder has received assistance in obtaining bonding for this Project, Bidder shall set forth name and nature of firm providing such assistance. Should that firm be listed as subcontractor, Bidder shall set forth the percentage of contract to be performed by that subcontractor.

Firm Providing Assistance and Nature of Assistance

Subcontractor: ☐ Yes ☐ No Percentage _____

ARTICLE 4 – CERTIFICATIONS - BID DEPOSITORY AND FEDERAL COURT FINDINGS

4.1 By signing this Bid Form, Bidder certifies that in preparation of this Bid Form, no bid was received by the bidder from a bid depository, which depository (as to any portion of the work) prohibits or imposes sanctions for the obtaining by bidder, or the submission to bidder by any subcontractor or vendor or supplier of goods and services, of a bid outside the bid depository. This certification shall constitute a warranty, the falsity of which shall entitle the State to pursue any remedy authorized by law, and shall include the right, at the option of the State, of declaring any contract made as a result thereof to be void.

4.2 By signing this Bid Form, Bidder swears under penalty of perjury that representations of the bid with respect to bidder's license are true and that no more than one final un-appealable finding of contempt of court by a Federal Court has been issued against the Contractor within the immediately preceding two-year period because of the Contractor's failure to comply with an order of a Federal Court which orders the Contractor to comply with an order of the National Labor Relations Board.

4.3 By signing this Bid Form, Bidder acknowledges that in accordance with the provisions of Section 3700 of the Labor Code, every contractor will be required to secure the payment of compensation to his employees. The Bidder agrees that they are aware of the provisions of Section 3700 of the Labor Code which require every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of that code, and will comply with such provisions before commencing the performance of the work of this contract.

4.4 By signing this Bid Form, Bidder certifies they will not ask an applicant for onsite construction-related employment to disclose orally or in writing information concerning the conviction history of the applicant on or at the time of an initial employment application.

This section shall not apply to a position for which the person or the state is otherwise required by state or federal law to conduct a conviction history background check or to any contract position with a criminal justice agency, as that term is defined in Section 13101 of the Penal Code.

This section shall not apply to a person to the extent that he or she obtains workers from a hiring hall pursuant to a bona fide collective bargaining agreement.

ARTICLE 5 – STATEMENT OF COMPLIANCE - NONDISCRIMINATION

Bidder (hereinafter referred to as "prospective contractor" in this Statement), by signing this Bid Form, hereby certifies, unless specifically exempted, compliance with Government Code Section 12990 (a-f), and CCR, Title 2, Division 4.1, Chapter 5 and Subchapter 5, Section 11102, in matters relating to reporting requirements and the development, implementation and maintenance of a Nondiscrimination Program; as set forth in the General Conditions of the Contract for Construction. Prospective contractor agrees not to unlawfully discriminate, harass or allow harassment against any employee or applicants for employment because of sex, race, color, ancestry, religious creed, national origin, physical disability (including HIV and AIDS), medical disability (cancer), age (over 40), marital status, and denial of family care leave.

ARTICLE 6 – QUESTIONNAIRE

6.1 In accordance with Public Contract Code, Section 10162, the Bidder shall complete the following questionnaire:

6.1.1 Has the Bidder, any officer of the Bidder, or any employee of the Bidder who has a proprietary interest in the Bidder, ever been disqualified, removed, or otherwise prevented from bidding on, or completing a Federal, State or Local government project because of a violation of law or a safety regulation?

☐ Yes

☐ No

6.1.2 Has the Bidder, any officer of the Bidder, or any employee of the Bidder who has a proprietary interest in the Bidder, ever received a safety violation or failed to file notifications to the Cal-OSHA, Federal OSHA, or EPA Agencies for employee records as required by CCR, Title 8, Section 5208 and CFR 40, Part 61?

☐ Yes

☐ No

If the answer to either 6.1.1 or 6.1.2 above is "Yes", then give the date(s) of the citation(s) or failure to make notifications, and explain the circumstances by attachment to this Bid Form.

6.2 In order to verify compliance with California Air Resources Board In-Use Off-Road Diesel Fueled Fleets Regulation, Section 2449(i), Title 13, California Code of Regulations, the Bidder shall complete the following questionnaire:

6.2.1. Does the work for the above-named Project involve use of vehicles subject to California Air Resources Board In-Use Off-Road Diesel Fueled Fleets Regulation?

☐ Yes

☐ No

If the answer to 6.2.1 above is "Yes", successful low Bidder shall, prior to the execution of a contract, submit copies of the valid Certificates of Reported Compliance, issued by the California Air Resources Board, for the fleet selected for the contract and listed subcontractors.

ARTICLE 7 – NON-COLLUSION DECLARATION TO BE EXECUTED BY BIDDER AND SUBMITTED WITH BID

By signing this Bid Form, Bidder, being first duly sworn, deposes and says that he or she is the authorized representative of the Bidder, 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 is 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 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.

ARTICLE 8 – ADDENDA

In submitting this bid, Bidder represents that Bidder has examined copies of all the Contract Documents and acknowledges receipt of the following addenda:

Addendum No.: _____ Date: _____

Addendum No.: _____ Date: _____

Addendum No.: _____ Date: _____

Addendum No.: _____ Date: _____

Addendum No.: _____ Date: _____

Addendum No.: _____ Date: _____

Failure to acknowledge on the Bid Form receipt of an addendum shall not in itself be cause for withdrawal or rejection of bids, if it can be shown that bidder did, in fact, receive such addendum prior to bid opening.

ARTICLE 9 – DVBE COMPLIANCE & PARTICIPATION SUMMARY

9.1 In accordance with Public Contract Code Section 10115, et seq., the Department of General Services has established criteria to implement the DVBE Program Goal as set forth in Document 00 22 10 of the Project Manual. Document 00 22 10, DVBE PARTICIPATION PROGRAM REQUIREMENTS cites the specific percentage of DVBE Participation required for this contract. **Failure to meet this requirement will result in a non-responsive bid.**

If DVBE Participation is a requirement for this bid, Bidder must complete Article 9.2.1 - DVBE PARTICIPATION SUMMARY. Failure to meet the full percentage of required DVBE participation will cause the bid to be deemed non-responsive and the bid will be rejected by the State. Listed DVBE vendor or subcontractor relationships should be first tier.

Any DVBE person, firm, corporation or organization committed by the bidder to fulfill DVBE Participation must: 1) be certified with the OSDs, and; 2) perform or provide a Commercially Useful Function as defined in Military and Veterans Code Section 999. Failure to comply with these requirements will deem the bid non-responsive and the bid will be rejected by the State.

If DVBE participation is set at zero percent, Bidder may still claim DVBE Incentive for voluntary DVBE Participation of 1% or greater. To have DVBE Incentive applied to this bid, Bidder must claim the Incentive in ARTICLE 2.3 - PREFERENCES & INCENTIVES and complete ARTICLE 9.2 - DVBE PARTICIPATION SUMMARY of the Bid Form.

If any DVBE subcontractor will be performing work in excess of 1/2 of 1% of the bid amount, the subcontractor **MUST** be listed under ARTICLE 9.2.1 - DVBE PARTICIPATION SUMMARY.

9.2 DVBE PARTICIPATION SUMMARY

NAME OF BIDDER: _____

Completion Instructions: Capture all required and non-required first tier DVBE Participation in the space below. Identify the proposed work (services, trade or materials) to be completed by the DVBE. List the Company name, contact information, OSDS Certification Number, and the DIR Registration Number. If the Bidder is a DVBE, list only the Bidder's information as 100%; do not list additional subcontractors. Indicate the dollar amount of the work to be performed by each DVBE company and the corresponding percentage of this bid price rounded to two decimals. Add up each Dollar Amount and identify the total on the bottom row marked, TOTAL DVBE PARTICIPATION. Calculate and list the percentage of the bid price this amount represents.

Pursuant to Military and Veterans Code §999.7, the awarding department shall withhold, on a contract entered into on or after January 1, 2021, ten thousand dollars (\$10,000) from the final payment, or the full final payment if less than ten thousand dollars (\$10,000), until a prime contractor complies with the certification requirements of subdivision (d) of Section Military and Veterans Code §999.5. A prime contractor that fails to comply with the certification requirement shall, after notice, be allowed to cure the defect. Notwithstanding any other law, if, after at least 15 calendar days but not more than 30 calendar days from the date of notice, the prime contractor refuses to comply with the certification requirements, the awarding department shall permanently deduct ten thousand dollars (\$10,000) from the final payment, or the full payment if less than ten thousand dollars (\$10,000).

9.2.1 Listed hereinafter is the certified DVBE company(s) proposed to perform work if the contract is awarded to Bidder:

TYPE OF WORK PERFORMED (Service, Trade or Materials)	NAME OF DVBE COMPANY, CONTACT PERSON AND PHONE NUMBER	OSDS CERTIFICATION NUMBER	DIR REGISTRATION NUMBER	DOLLAR AMOUNT OF WORK PERFORMED	PERCENTAGE OF BID PRICE
TOTAL DVBE PARTICIPATION:					

DETERMINATION OF TOTAL DVBE PARTICIPATION: Determination of total DVBE participation will be on the basis of total sum of all listed DVBE above and as verified by the State. When there is a discrepancy between the Dollar Amount and the Percentage of Bid, the higher of the two will prevail.

ARTICLE 10 – LIST OF PROPOSED SUBCONTRACTORS

Listed hereinafter are the **name**, **location**, **license number**, and **registration number** of all subcontractors who will be employed, and the **kind of work** which each will perform if the contract is awarded to the undersigned. I understand that under Public Contract Code Section 4100, et. seq., I must here clearly set forth the name and location of each subcontractor who will perform work or labor or render service to me in or about the construction of the work in an amount in excess of one-half of one percent (1/2 of 1%), of my total bid, and that as to any work in which I fail to do so, I agree to perform that portion myself or be subject to penalty under the act. (Note: In case more than one subcontractor is named for the same kind of work, state the portion that each will perform.) I also understand that listed subcontractors must be registered with the Department of Industrial Relations in order to be listed for and to engage in the performance of work on Public Works projects. Notwithstanding General Conditions Paragraph 1.1, the definition of a **SUBCONTRACTOR** for the purposes of the Subletting and Subcontracting law is as follows: A trade Contractor who is licensed with the Contractors' State License Board with an A, B, C or D classification, as defined pursuant to PCC Section 4113.

- Vendors or suppliers of materials only need not be listed.

Failure to list Kind of Work, Name, Location or License Number shall cause the bid to be rejected as non-responsive.

Kind of Work	Name	Location (City)	CSLB License No.	DIR Registration No.

If further space is required below, copy this page and attach hereto to be made a part of the Bid Form. Sub List Page _____ of _____

Pursuant to Public Contract Code section 2010, a person that submits a bid or proposal to, or otherwise proposes to enter into or renew a contract with, a state agency with respect to any contract in the amount of \$100,000 or above shall certify, under penalty of perjury, at the time the bid or proposal is submitted or the contract is renewed, all of the following:

1. **CALIFORNIA CIVIL RIGHTS LAWS:** For contracts executed or renewed after January 1, 2017, the contractor certifies compliance with the Unruh Civil Rights Act (Section 51 of the Civil Code) and the Fair Employment and Housing Act (Section 12960 of the Government Code); and
2. **EMPLOYER DISCRIMINATORY POLICIES:** For contracts executed or renewed after January 1, 2017, if a Contractor has an internal policy against a sovereign nation or peoples recognized by the United States government, the Contractor certifies that such policies are not used in violation of the Unruh Civil Rights Act (Section 51 of the Civil Code) or the Fair Employment and Housing Act (Section 12960 of the Government Code).

CERTIFICATION

I, the official named below, certify under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Proposer/Bidder Firm Name (Printed)	Federal ID Number
By (Authorized Signature)	
Printed Name and Title of Person Signing	
Executed in the County of	Executed in the State of
Date Executed	

NONCOLLUSION DECLARATION TO BE EXECUTED BY BIDDER AND SUBMITTED WITH
BID

The undersigned declares:

I am the _____ of _____, the party making the foregoing bid.

The bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation. The bid is genuine and not collusive or sham. The bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid. The bidder has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or anyone else to put in a sham bid, or to refrain from bidding. 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. All statements contained in the bid are true. 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, to any corporation, partnership, company, association, organization, bid depository, or to any member or agent thereof, to effectuate a collusive or sham bid, and has not paid, and will not pay, any person or entity for such purpose.

Any person executing this declaration on behalf of a bidder that is a corporation, partnership, joint venture, limited liability company, limited liability partnership, or any other entity, hereby represents that he or she has full power to execute, and does execute, this declaration on behalf of the bidder.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct and that this declaration is executed on _____ [date], at _____ [city], _____ [state]."

Signed

END OF DOCUMENT

BIDDER'S BOND

STATE OF CALIFORNIA
DEPARTMENT OF GENERAL SERVICES

KNOW ALL MEN BY THESE PRESENTS:

That we,

_____, as Principal,
and _____

as Surety, are held and firmly bound unto the State of California, hereinafter called the State, in the penal sum of ten percent (10%) of the total amount of the bid of the Principal above named, submitted by said Principal to the State of California, Department of General Services, for the work described below, for the payment of which sum in lawful money of the United States, well and truly to be made, we bind ourselves, our heirs, executors, administrators and successors, jointly and severally, firmly by these presents.

THE CONDITION of this obligation is such that:

WHEREAS, the Principal has submitted the above-mentioned bid to the State of California, Department of General Services, for certain construction specifically described as follows, for which bids are to be opened at _____
(Insert place where bids will be opened) on _____ (Insert date of bid opening)
for _____

(Copy here the exact description of work, including location, as it appears on the proposal)

NOW, THEREFORE, If the aforesaid Principal is awarded the contract and, within the time and manner required under the specifications, after the prescribed forms are presented to him for signature, enters into a written contract, in the prescribed form, in accordance with the bid, and files the two bonds with the Department, one to guarantee faithful performance and the other to guarantee payment for labor and materials, as required by law, then this obligation shall be null and void; otherwise, it shall be and remain in full force and virtue.

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 a reasonable attorney's fee to be fixed by the court.

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

(SEAL)

(SEAL)

(SEAL)

Name of Principal and Address for Service

By _____

Contractor Signature

(SEAL)

(SEAL)

(SEAL)

Name of Surety and Address for Service

By _____

Attorney-in-Fact Signature

NOTE: Signatures of those executing for the Surety must be properly acknowledged.

CERTIFICATE OF ACKNOWLEDGMENT

STATE OF CALIFORNIA

COUNTY OF _____ ss

On this _____ day of _____ in the year of 20____ before me, a notary public in and for the county and state aforesaid, personally appeared, _____ and proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and proved to me on the basis of satisfactory evidence to be the attorney-in-fact of _____ and acknowledged to me that he/she subscribed the name of the said company thereto as surety, and his/her own name as attorney-in-fact.

(SEAL)

Notary Public

DOCUMENT 00 43 16-1

LIST OF CERTIFIED SMALL BUSINESS SUBCONTRACTOR(S)

COMPLETION INSTRUCTIONS
PLEASE READ THESE INSTRUCTION CAREFULLY

IN ORDER TO GRANT A FIVE PERCENT (5%) NON-SMALL BUSINESS SUBCONTRACTOR PREFERENCE TO A NON-SMALL BUSINESS, THE BIDDER MUST COMPLETE THE CERTIFIED SMALL BUSINESS SUBCONTRACTOR SUMMARY (CSBSS) FORM 00 43 16-2. THIS FORM **MUST** BE COMPLETED BY THE NON-SMALL BUSINESS BIDDER AND RETURNED TO THE AWARDING AGENCY NO LATER THAN FORTY-EIGHT (48) HOURS AFTER THE TIME OF RECEIPT OF BIDS. IF THE BIDDER FAILS TO RETURN THE COMPLETED FORM 00 43 16-2 WITHIN 48 HOURS, THE CLAIM FOR SMALL BUSINESS PREFERENCE WILL BE DENIED.

CSBS COMPANY NAME – list the name(s) of the certified small business subcontractor(s) to be used to complete this project.

CSBS COMPANY ADDRESS – list the address(es) of the certified small business subcontractor(s) to be used to complete this project.

CSBS COMPANY TELEPHONE NUMBER – list the telephone number(s) of the certified small business subcontractor(s) to be used to complete this project.

CSBS PERCENTAGE (%) OR DOLLAR (\$) AMOUNT – list the percentage(s) or dollar amount(s) that will be given to the certified small business subcontractor(s) used to complete this project.

DESCRIPTION OF WORK – identify the proposed work including services or materials to be performed by the certified small business subcontractor(s) to complete this project.

TO OBTAIN THE 5% NON-CERTIFIED SMALL BUSINESS PREFERENCE, THE LISTED SUBCONTRACTOR(S) AND/OR SUPPLIER(S) FIRM(S) MUST BE FORMALLY CERTIFIED BY THE OFFICE OF SMALL BUSINESS AND DVBE CERTIFICATION (OSDC) AS A SMALL AND/OR MICROBUSINESS. (Prime contractors should ask Subcontractor/Supplier to provide them with a copy of their OSDC certification letter)

CERTIFIED SMALL BUSINESS SUBCONTRACTOR(S) SUMMARY

BIDDER NAME _____

PROJECT NUMBER _____

STATE OF CALIFORNIA
CERTIFIED SMALL BUSINESS SUBCONTRACTOR(S) SUMMARY

Form date 09/28/2004

Listed hereinafter is the **name of business, address, telephone number, dollar amount or percentage** of all certified subcontractors who will be employed, and the **description of the work** which each will perform if the contract is awarded to this bidder.

Failure to list name of business, address, telephone number, description of work to be performed and dollar amount or percentage of work for each subcontractor may be cause for denial of the non-small business subcontractor preference.

(If further space is required for the List of Proposed Subcontractors, additional sheets showing the required information, as indicated below, shall be attached hereto and made a part of the Bid).

CERTIFIED SMALL BUSINESS SUBCONTRACTOR (Name of Business)	CERTIFIED SMALL BUSINESS SUBCONTRACTOR (Address)	CERTIFIED SMALL BUSINESS SUBCONTRACTOR (Telephone Number)	CERTIFIED SMALL BUSINESS SUBCONTRACTOR (\$ or % Amount)	CERTIFIED SMALL BUSINESS SUBCONTRACTOR (Description of Work) (Service or Materials)

CERTIFIED SMALL BUSINESS SUBCONTRACTOR(S) SUMMARY

DOCUMENT 00 45 46
PAYEE DATA RECORD

STATE OF CALIFORNIA - DEPARTMENT OF FINANCE

PAYEE DATA RECORD

(Required when receiving payment from the State of California in lieu of IRS W-9 or W-7)

STD 204 (Rev. 03/2021)

Section 1 - Payee Information

NAME (This is required. Do not leave this line blank. Must match the payee's federal tax return)

BUSINESS NAME, DBA NAME or DISREGARDED SINGLE MEMBER LLC NAME (if different from above)

MAILING ADDRESS (number, street, apt. or suite no.) (See instructions on Page 2)

CITY, STATE, ZIP CODE

E-MAIL ADDRESS

Section 2 - Entity Type

Check one (1) box only that matches the entity type of the Payee listed in Section 1 above. (See instructions on page 2)

☐ **SOLE PROPRIETOR / INDIVIDUAL**

☐ **SINGLE MEMBER LLC Disregarded Entity owned by an Individual**

☐ **PARTNERSHIP**

☐ **ESTATE OR TRUST**

☐ **CORPORATION** (see instructions on page 2)

☐ **MEDICAL** (e.g., dentistry, chiropractic, etc.)

☐ **LEGAL** (e.g., attorney services)

☐ **EXEMPT** (e.g., nonprofit)

☐ **ALL OTHERS**

Section 3 - Tax Identification Number

Enter your Tax Identification Number (TIN) in the appropriate box. The TIN must match the name given in Section 1 of this form. Do not provide more than one (1) TIN. The TIN is a 9-digit number. **Note:** Payment will not be processed without a TIN.

- For **Individuals**, enter SSN.
- If you are a **Resident Alien**, and you do not have and are not eligible to get an SSN, enter your ITIN.
- Grantor Trusts (such as a Revocable Living Trust while the grantors are alive) may not have a separate FEIN. Those trusts must enter the individual grantor's SSN.
- For **Sole Proprietor or Single Member LLC (disregarded entity)**, in which the sole member is an individual, enter SSN (ITIN if applicable) or FEIN (FTB prefers SSN).
- For **Single Member LLC (disregarded entity)**, in which the sole member is a business entity, enter the owner entity's FEIN. Do not use the disregarded entity's FEIN.
- For all other entities including LLC that is taxed as a corporation or partnership, estates/trusts (with FEINs), enter the entity's FEIN.

Social Security Number (SSN) or Individual Tax Identification Number (ITIN)

_____ - _____ - _____

OR

Federal Employer Identification Number (FEIN)

_____ - _____

Section 4 - Payee Residency Status (See instructions)

☐ **CALIFORNIA RESIDENT** - Qualified to do business in California or maintains a permanent place of business in California.

☐ **CALIFORNIA NONRESIDENT** - Payments to nonresidents for services may be subject to state income tax withholding.

☐ No services performed in California

☐ Copy of Franchise Tax Board waiver of state withholding is attached.

Section 5 - Certification

I hereby certify under penalty of perjury that the information provided on this document is true and correct. Should my residency status change, I will promptly notify the state agency below.

NAME OF AUTHORIZED PAYEE REPRESENTATIVE

TITLE

E-MAIL ADDRESS

SIGNATURE

DATE

TELEPHONE (include area code)

Section 6 - Paying State Agency

Please return completed form to:

STATE AGENCY/DEPARTMENT OFFICE

Department of General Services, Administrative Division

UNIT/SECTION

Office of Business and Acquisition Services, Contract Services Section

MAILING ADDRESS

707 Third Street, MS 508

FAX

n/a

TELEPHONE (include area code)

n/a

CITY

West Sacramento

STATE

CA

ZIP CODE

95805

E-MAIL ADDRESS

n/a

PAYEE DATA RECORD

RESDMSTR: 7.8.2021

00 45 46 - 1

00000000011927A

PAYEE DATA RECORD

(Required when receiving payment from the State of California in lieu of IRS W-9 or W-7)

STD 204 (Rev. 03/2021)

GENERAL INSTRUCTIONS

Type or print the information on the Payee Data Record, STD 204 form. Sign, date, and return to the state agency/department office address shown in Section 6. Prompt return of this fully completed form will prevent delays when processing payments.

Information provided in this form will be used by California state agencies/departments to prepare Information Returns (Form 1099).

NOTE: Completion of this form is optional for Government entities, i.e. federal, state, local, and special districts.

A completed Payee Data Record, STD 204 form, is required for all payees (non-governmental entities or individuals) entering into a transaction that may lead to a payment from the state. Each state agency requires a completed, signed, and dated STD 204 on file; therefore, it is possible for you to receive this form from multiple state agencies with which you do business.

Payees who do not wish to complete the STD 204 may elect not to do business with the state. If the payee does not complete the STD 204 and the required payee data is not otherwise provided, payment may be reduced for federal and state backup withholding. Amounts reported on Information Returns (Form 1099) are in accordance with the Internal Revenue Code (IRC) and the California Revenue and Taxation Code (R&TC).

Section 1 – Payee Information

Name – Enter the name that appears on the payee's federal tax return. The name provided shall be the tax liable party and is subject to IRS TIN matching (when applicable).

- Sole Proprietor/Individual/Revocable Trusts – enter the name shown on your federal tax return.
- Single Member Limited Liability Companies (LLCs) that is disregarded as an entity separate from its owner for federal tax purposes - enter the name of the individual or business entity that is tax liable for the business in section 1. Enter the DBA, LLC name, trade, or fictitious name under Business Name.
- Note: for the State of California tax purposes, a Single Member LLC is not disregarded from its owner, even if they may be disregarded at the Federal level.
- Partnerships, Estates/Trusts, or Corporations – enter the entity name as shown on the entity's federal tax return. The name provided in Section 1 must match to the TIN provided in section 3. Enter any DBA, trade, or fictitious business names under Business Name.

Business Name – Enter the business name, DBA name, trade or fictitious name, or disregarded LLC name.

Mailing Address – The mailing address is the address where the payee will receive information returns. Use form STD 205, Payee Data Record Supplement to provide a remittance address if different from the mailing address for information returns, or make subsequent changes to the remittance address.

Section 2 – Entity Type

If the Payee in Section 1 is a(n)...	THEN Select the Box for...
Individual • Sole Proprietorship • Grantor (Revocable Living) Trust disregarded for federal tax purposes	Sole Proprietor/Individual
Limited Liability Company (LLC) owned by an individual and is disregarded for federal tax purposes	Single Member LLC-owned by an individual
Partnerships • Limited Liability Partnerships (LLP) • and, LLC treated as a Partnership	Partnerships
Estate • Trust (other than disregarded Grantor Trust)	Estate or Trust
Corporation that is medical in nature (e.g., medical and healthcare services, physician care, nursery care, dentistry, etc.) • LLC that is to be taxed like a Corporation and is medical in nature	Corporation-Medical
Corporation that is legal in nature (e.g., services of attorneys, arbitrators, notary publics involving legal or law related matters, etc.) • LLC that is to be taxed like a Corporation and is legal in nature	Corporation-Legal
Corporation that qualifies for an Exempt status, including 501(c) 3 and domestic non-profit corporations.	Corporation-Exempt
Corporation that does not meet the qualifications of any of the other corporation types listed above • LLC that is to be taxed as a Corporation and does not meet any of the other corporation types listed above	Corporation-All Other

Section 3 – Tax Identification Number

The State of California requires that all parties entering into business transactions that may lead to payment(s) from the state provide their Taxpayer Identification Number (TIN). The TIN is required by R&TC sections 18646 and 18661 to facilitate tax compliance enforcement activities and preparation of Form 1099 and other information returns as required by the IRC section 6109(a) and R&TC section 18662 and its regulations.

Section 4 – Payee Residency Status**Are you a California resident or nonresident?**

- A corporation will be defined as a "resident" if it has a permanent place of business in California or is qualified through the Secretary of State to do business in California.
- A partnership is considered a resident partnership if it has a permanent place of business in California.
- An estate is a resident if the decedent was a California resident at time of death.
- A trust is a resident if at least one trustee is a California resident.
 - For individuals and sole proprietors, the term "resident" includes every individual who is in California for other than a temporary or transitory purpose and any individual domiciled in California who is absent for a temporary or transitory purpose. Generally, an individual who comes to California for a purpose that will extend over a long or indefinite period will be considered a resident. However, an individual who comes to perform a particular contract of short duration will be considered a nonresident.

For information on Nonresident Withholding, contact the Franchise Tax Board at the numbers listed below:

Withholding Services and Compliance Section: 1-888-792-4900

For hearing impaired with TDD, call: 1-800-822-6268

E-mail address: wscs.gen@ftb.ca.gov

Website: www.ftb.ca.gov

Section 5 – Certification

Provide the name, title, email address, signature, and telephone number of individual completing this form and date completed. In the event that a SSN or ITIN is provided, the individual identified as the tax liable party must certify the form. Note: the signer may differ from the tax liable party in this situation if the signer can provide a power of attorney documented for the individual.

Section 6 – Paying State Agency

This section must be completed by the state agency/department requesting the STD 204.

Privacy Statement

Section 7(b) of the Privacy Act of 1974 (Public Law 93-579) requires that any federal, state, or local governmental agency, which requests an individual to disclose their social security account number, shall inform that individual whether that disclosure is mandatory or voluntary, by which statutory or other authority such number is solicited, and what uses will be made of it. It is mandatory to furnish the information requested. Federal law requires that payment for which the requested information is not provided is subject to federal backup withholding and state law imposes noncompliance penalties of up to \$20,000. You have the right to access records containing your personal information, such as your SSN. To exercise that right, please contact the business services unit or the accounts payable unit of the state agency(ies) with which you transact that business.

All questions should be referred to the requesting state agency listed on the bottom front of this form.

STANDARD AGREEMENT

STD 213 (Rev. 03/2019)

AGREEMENT NUMBER

PURCHASING AUTHORITY NUMBER (if applicable)

1. This Agreement is entered into between the Contracting Agency and the Contractor named below:

CONTRACTING AGENCY NAME

Department of General Services, Real Estate Services Division, Project Management and Development Branch

2. The Term of this Agreement is: CONTRACTOR NAME

START DATE

As Identified in the Notice to Proceed

THROUGH END DATE

XXX Calendar Days, commencing on the Start Date Identified in the Notice to Proceed

3. The maximum amount of this Agreement is: \$X,XXX,XXX.XX

4. The parties agree to comply with the terms and conditions of the following exhibits, which are by this reference made a part of the Agreement.

EXHIBITS	TITLE	PAGES
Project Title	Project Title Client Address City, County, CA Project Number	
Exhibit A	Performance Bond, Payment Bond, Bid Form, and Invitation to Bid	
Exhibit B	Project Manual (except Bidding Requirements), dated XXX including the following Contract Documents: Introductory Information General Conditions of the Contract for Construction Supplementary Conditions Specifications Addenda No.	
Exhibit C	XXX Drawings, dated XXX, as listed in Document 00 01 15 of the Project Manual	

Items shown with an asterisk (), are here by incorporated by reference and made part of this agreement as if attached hereto.**These documents can be viewed at <https://www.dgs.ca.gov/ols/resources>*

IN WITNESS WHEREOF, THIS AGREEMENT HAS BEEN EXECUTED BY THE PARTIES HERETO.

CONTRACTOR

CONTRACTOR NAME (if other than an individual, state whether a corporation, partnership, etc.)

CONTRACTOR BUSINESS ADDRESS

CITY

STATE

ZIP

PRINTED NAME OF PERSON SIGNING

TITLE

CONTRACTOR AUTHORIZED SIGNATURE

DATE SIGNED

STATE OF CALIFORNIA

CONTRACTING AGENCY NAME

CONTRACTING AGENCY ADDRESS

CITY

STATE

ZIP

PRINTED NAME OF PERSON SIGNING

TITLE

CONTRACTOR AUTHORIZED SIGNATURE

DATE SIGNED

CALIFORNIA DEPARTMENT OF GENERAL SERVICES APPROVAL

EXEMPTION, IF APPLICABLE

PERFORMANCE BOND TO ACCOMPANY CONSTRUCTION CONTRACT

KNOW ALL MEN BY THESE PRESENTS:

THAT WHEREAS, The State of California, acting by and through the Department of General Services has awarded to _____, a _____ existing under and by virtue of the laws of the State of California as Contractor, a contract for the work described as follows:

Project Name
Client Agency
Project Information
Reference Number, Project Number, Contract Number

AND WHEREAS, Said Contractor is required to furnish a bond in connection with said contract, guaranteeing the faithful performance thereof;

NOW, THEREFORE, We the undersigned Contractor and surety are held and firmly bound unto the State of California in the sum of _____ Dollars, (\$000,000) to be paid to the State or its certain attorney, its successors and assigns; for which payment well 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 the above bounded Contractor, his or its 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 the foregoing contract and any alteration thereof made as therein provided, on his or their part to be kept and performed at the time and in the manner therein specified, and in all respects according to their true intent and meaning, and shall indemnify and save harmless the State of California, its officers and agents, as therein stipulated, then this obligation shall become and be null and void; otherwise it shall be and remain in full force and virtue.

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

Name of Contractor and Address for Service

By _____
Contractor Signature

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

Name of Surety and Address for Service (SEAL)

By _____
Attorney-in-Fact Signature

CERTIFICATE OF ACKNOWLEDGMENT

STATE OF CALIFORNIA
COUNTY OF _____ ss

On this _____ day of _____ in the year of 20____ before me, a notary public in and for the county and state aforesaid, personally appeared, _____ proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and proved to me on the basis of satisfactory evidence to be the attorney-in-fact of _____ and acknowledged to me that he/she subscribed the name of the said company thereto as surety, and his/her own name as attorney-in-fact.
(SEAL)

NOTARY PUBLIC

PAYMENT BOND TO ACCOMPANY CONSTRUCTION CONTRACT
(Public Contract Code Sections 7103 and 10221)

BOND NO. _____

The premium on this bond is _____ for the term of _____.

KNOW ALL MEN BY THESE PRESENTS:

That the State of California, acting by and through the _____, has awarded to

_____ whose address for service is _____,

as Principal, a contract for the work described as follows:

Project Title: _____

Project Location: _____

WHEREAS, the provisions of Public Contract Code Sections 7103 and 10221 require that the Principal file a bond in connection with said contract and this bond is executed and tendered in accordance therewith.

NOW THEREFORE, Principal and _____, a Surety Corporation organized under the laws of _____, and authorized to transact a general surety business in the State of California, as Surety, are held and firmly bound to the People of the State of California in the penal sum of _____, for which payment we bind ourselves, our heirs, executors, administrators, successors and assigns jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH,

1. That if said Principal or its subcontractors shall fail to pay any of the persons named in Civil Code Section 9100, or amounts due under the Unemployment Insurance Code with respect to work or labor performed under the contract, or for any amounts required to be deducted, withheld, and paid over to the Employment Development Department from the wages of employees of the Principal and subcontractors pursuant to Section 13020 of the Unemployment Insurance Code, with respect to such work and labor, that the surety herein will pay for the same, otherwise this obligation is to be void. In case suit is brought upon this bond, the Surety will pay a reasonable attorney's fee to be fixed by the court.
2. This bond shall inure to the benefit of any persons named in Civil Code Section 9100 as to give a right of action to such persons or their assigned in any suit brought upon this bond.
3. The aggregate liability of the Surety hereunder, including costs and attorney fees, on all claims whatsoever shall not exceed the penal sum of the bond in accordance with the provisions of Section 996.470(a) of the Code of Civil Procedure.
4. This bond is executed by the Surety, to comply with the provisions of Public Contract Code Sections 7103, 10221 and 10222, of Chapter 5, Title 3, Part 6, Division 4 of the Civil Code and of Chapter 2, Title 14, Part 2 of the Code of Civil Procedure and said bond shall be subject to all of the terms and provisions thereof.
5. This bond may be cancelled by the Surety in accordance with the provisions of Section 996.310 et seq. of the Code of Civil Procedure.
6. This bond to become effective _____.

(NAME OF SURETY)

(ADDRESS FOR SERVICE)

I certify (or declare) under penalty of perjury under the laws of the State of California that I have executed the foregoing bond under an unrevoked power of attorney.

Executed in _____ on _____
(CITY AND STATE) (DATE)

X _____

(SIGNATURE OF ATTORNEY IN FACT)

STATE OF CALIFORNIA
STD 807 (Rev. 10/2019)

(PRINTED OR TYPED NAME OR ATTORNEY IN FACT)

Change Order

Date Issued: (Type Date)

Change Order No: _____

From Division: **Real Estate Services Division**
 Branch: **Project Management and Development Branch**
 Address: **707 Third Street, 4th Floor**
 City, State Zip: **West Sacramento, CA 95605**

ABMS Contract No: _____
 F\$ Contract No.: _____
 Project ID: **DGS000000XXXXXX**
 Activity ID: **CN**
 Resource Type: **CONTR**
 Category: **10000**

Revision No.: _____
 Date Revised: _____

To: (Contractor's Name:) _____
 (Contractor's Address:) _____
 (Contractor's City/State/Zip:) _____

Project: _____
 Client Agency: _____
 Facility Name: _____
 Facility Location: _____

This Change Order is issued pursuant to the provisions of the General Conditions Article 6 of the Contract relating to **Changes in the Work** and shall not be effective until approved by the Department of General Services, REAL ESTATE SERVICES DIVISION. The State will issue the change order after the conditions have been agreed to. The contractor is directed to proceed with construction activities in such manner as to preclude the necessity for later altering the work in order to accomplish this change. This document must be completed in every detail, signed, dated and returned in **DUPLICATE** to the State's representative within **fifteen (15)** calendar days from the date of issue, as provided in the General Conditions of the Contract. Upon approval, a signed copy will be sent to the contractor as authority for proceeding with the changes (or as confirmation of previously issued instructions).

Change Order Description

<u>Item #</u>	<u>Description</u>	<u>Amount</u>
		<i>Total this Change Order</i>
		\$100,000.00

The Undersigned Contractor agrees to make this change in accordance with the printed conditions herein for
 The Additive sum of \$ _____ or deductive sum (\$ _____).

This change is approved for the sum stated above and for a time extension of _____ calendar days.

This Agreement constitutes full and final settlement for all aspects of the work described herein. As part of this agreement, Contractor waives any and all rights to claim for any delay or impact costs associated with the work described herein, including, but not limited to, inefficiency, unabsorbed and extended home office overhead and extended field office overhead.

Authorized Contractor's Signature	Title	Date
Authorized State's Representative Signature	Title	Date

Distribution of Change Order:

Originals to: 1) Contractor 2) RESD Contract Unit
Copies to: 1) Project Manager 2) State Controllers Office 3) DGS Capital Outlay Account 4) State Inspector



Document 00 72 00

General Conditions of the Contract for Construction

October 2011 Edition

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DOCUMENT 00 72 00 - GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION

ARTICLE 1 - GENERAL PROVISIONS

1.1 **DEFINITIONS:** When the following terms appear in the Contract, they shall have the following meaning:

1.1.1 Acceptance of the Work: Written acceptance of the Work by the Director of the Department of General Services, State of California, or the Director's designee.

1.1.2 Act of God: An Act of God shall include only the following occurrences or conditions and effects:

- .1 Earthquakes in excess of a magnitude of 3.5 on the Richter Scale; or
- .2 Tidal waves.

1.1.3 Addendum (Addenda): A document issued by the State during the bidding period which modifies, supersedes or supplements the Contract Documents.

1.1.4 Alternative: Refer to Approved Equal and Substitution.

1.1.5 Applicable Codes: Include, but are not limited to, applicable laws, statutes, regulations, rules, building and other codes, ordinances, rulings, and lawful orders of all public authorities having jurisdiction over the State, the Contractor, Subcontractors, the Project, the Work, or the execution of the Work.

1.1.6 Approved Equal: Material, equipment, or method approved by the State for use in the Work, as being acceptable as an equivalent in essential attributes to the material, equipment, or method specified in the Contract Documents.

1.1.7 Agreement: The written and executed document known as Document 00 52 00, Agreement.

1.1.8 Architect or Engineer: The State, or the State's consultant listed in the Contract Documents as the designer of record responsible for the preparation and coordination of the Drawings and technical sections of the Project Manual.

1.1.9 Beneficial Occupancy: Occupancy and use by the State of all, or part, or parts, of the Work as selected by the State, prior to Completion.

1.1.10 Bidder: Any individual, partnership, corporation, association, joint venture, or any combination thereof, submitting a Bid Form for the Work.

1.1.11 Change Order: A written order issued by the State used to determine adjustments in the Contract based on:

- .1 a change in the Work,
- .2 the amount of the adjustment in the Contract Sum, and
- .3 the extent of the adjustment in the Contract Time.

1.1.12 Claim: An unresolved Dispute arising under or relating to the performance of the Contract which can only be filed after Acceptance of the Work and the final statement to the Contractor.

1.1.13 Completion: When the entire Work has been performed in accordance with the Contract requirements as delineated in the Contract Documents and Project Manual. Completion of the Work occurs when the State's final inspection has been made and all construction, services and deliverables have been fully executed as determined by the State's Representative, including but not limited to completion of all punch-list items and delivery of as-built drawings, operation & maintenance manuals, guaranties, warranties, spare parts, reports and certifications as noted in the Project Manual, Section 01 77 00.

1.1.14 Contract: The Contract Documents form the Contract for Construction. 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 by a Change Order. The Contract Documents shall not be construed to create a contractual relationship of any kind between any persons or entities other than the State and the Contractor.

- 1.1.15 Contract Documents: The Contract Documents consist of the Agreement between the State and Contractor, Payment and Performance Bonds; the Conditions of the Contract, including General, Supplementary and other Conditions; Drawings, Specifications, Addenda and Change Orders.
- 1.1.16 Contract Sum: The Contract Sum is stated in the Agreement and, including authorized adjustments by Change Order, is the total amount payable by the State to the Contractor for performance of the Work under the Contract Documents.
- 1.1.17 Contract Time: The Contract Time is the period of time, from the Start Date to the date of Completion of the Work, including authorized adjustments, allotted in the Contract.
- 1.1.18 Contractor: The individual, partnership, corporation, association, joint venture, or any combination thereof, who has entered into a contract with the State, identified as such in the Agreement, and referred to throughout the Contract as if singular in number. The term "Contractor" means the Contractor or the Contractor's representative.
- 1.1.19 Day: Calendar day, unless otherwise specifically defined.
- 1.1.20 Department: The Department of General Services, State of California.
- 1.1.21 Director: The Director of the Department of General Services, State of California, or the Director's designee.
- 1.1.22 Dispute: A demand during performance of the Work seeking adjustment or interpretation of Contract terms, payment of money, extension of time or other relief with respect to the terms of the Contract. A Dispute is not a Claim.
- 1.1.23 Drawings: The graphic and pictorial portions of the Contract Documents, illustrating the design, location and dimensions of the Work, generally including but not limited to, plans, elevations, sections, details, schedules and diagrams.
- 1.1.24 Emergency: A sudden, unexpected occurrence that poses a clear and imminent danger, requiring immediate action to prevent or mitigate the loss or impairment of life, health, property, or essential public services.
- 1.1.25 General Notes: The written instructions, provisions, conditions or other requirements appearing on the Drawings, and so identified thereon, which pertain to the performance of the Work.
- 1.1.26 Guarantee: The Contractor's assurance that the Project complies with the requirements of the Contract Documents.
- 1.1.27 Official Progress Schedule: The Contractor's baseline schedule and updates accepted by the State.
- 1.1.28 Or Equal: Refer to Approved Equal.
- 1.1.29 Owner: The State of California.
- 1.1.30 Product Data: Illustrations, standard schedules, performance charts, instructions, brochures, diagrams and other information furnished by the Contractor to illustrate materials or equipment for some portion of the Work.
- 1.1.31 Project: The total construction of which the Work performed under the Contract may be the whole or a part.
- 1.1.32 Project Manual: The volume(s) assembled for the Work which includes the Introductory Information, Bidding Requirements, Contracting Requirements, Specifications, and other information as may be listed in the Project Manual Table of Contents.
- 1.1.33 Request for Information (RFI): A written request by the Contractor submitted in a State provided format for information regarding Project specific issues.
- 1.1.34 Retention: A percentage of the Contract Sum held back upon completion of the Work, or any portion of the Work, to cover outstanding liabilities, contingencies, and the like, as specified in the Contract Documents.
- 1.1.35 Samples: Physical examples which illustrate materials, equipment or workmanship and establish standards by which the Work will be judged.

- 1.1.36 **Schedule of Values:** A document furnished by the Contractor to the State reflecting the portions of the Contract sum allotted for the various parts of the Work, and used as the basis for reviewing the Contractor's applications for payment request.
- 1.1.37 **Shop Drawings:** Drawings, diagrams, schedules, and other data specially issued for the Work by the Contractor or a Subcontractor, Sub-subcontractor, and material suppliers to illustrate some portion of the Work.
- 1.1.38 **Specifications:** That portion of the Contract Documents consisting of the written requirements for materials, standards, equipment, construction systems, and standards of workmanship for the Work, and performance of related services.
- 1.1.39 **State:** The State of California acting through the Department of General Services.
- 1.1.40 **State Construction Supervisor/Inspector:** The person(s) authorized by the State to provide inspection services, field coordination and quality control during construction.
- 1.1.41 **State Contract Act:** The act which is set forth in the California Public Contract Code, Section 10100, et seq.
- 1.1.42 **State's Representative:** Person(s) authorized by the State to act on behalf of the State for the Project.
- 1.1.43 **Subcontractor:** An individual, partnership, corporation, association, joint venture, or any combination thereof, who has a direct contract with the Contractor to perform work or labor or render service in or about the Work. The term "Subcontractor" is referred to as if singular in number and means a Subcontractor or a representative of the Subcontractor. The term "Subcontractor" shall not include those who supply materials only or a separate contractor or subcontractors of a separate contractor.
- 1.1.44 **Sub-subcontractor:** A person or entity who has a direct or indirect contract with a Subcontractor to perform a portion of the work. The term "Sub-subcontractor" is referred to as if singular in number and means a Sub-subcontractor or a representative of the Sub-subcontractor.
- 1.1.45 **Not Used**
- 1.1.46 **Substitution:** A material and/or process offered by the Contractor in lieu of the specified material and/or process, and accepted by the State in writing as being equivalent (equal) to the specified material and/or process.
- 1.1.47 **Warranty:** A Contractor's, manufacturer's or material supplier's assurance that products and services provided meet the requirements of the Contract Documents.
- 1.1.48 **Work:** Construction, services and deliverables required by the Contract Documents and Project Manual, including labor, materials, equipment, services, and documents provided or to be provided by the Contractor to fulfill the Contractor's obligations under the Contract, including but not limited to requirements such as; completion of punch-list items, as-built drawings, operation & maintenance manuals, guaranties, warranties, spare parts, reports, and certifications.

1.2 EXECUTION, CORRELATION AND INTENT

- 1.2.1 The Contract will not be binding on the State until appropriately endorsed by the State's legal Representative, in accordance with Public Contract Code, Section 10220.
- 1.2.2 Execution of the Contract by the Contractor is a representation that the Contractor is familiar with the methodology under which the work is to be performed and has correlated personal observations with requirements of the Contract Documents.
- 1.2.3 The intent of the Contract Documents is to include items necessary for completion of the Work by the Contractor. The Contract Documents are complementary, and what is required by one shall be as binding as if required by all. Performance by the Contractor shall be required only to the extent consistent with the Contract Documents and reasonably inferable from them as being necessary to produce the intended results.
- 1.2.4 Organization of the Specifications into Groups, Divisions, subgroups, Sections and Articles, and arrangement of Drawings shall not be the basis that Contractor utilizes in dividing the Work among Subcontractors, nor in establishing the extent of work to be performed by any trade.

1.2.5 When standards of the Federal Government, trade societies, or trade associations are referred to in the Contract Documents by specific date of issue, these shall be considered as part of the Contract Documents. When such references do not bear date of issue, current published edition at the date of the first Invitation to Bid shall be considered as part of the Contract Documents.

1.2.6 Unless otherwise stated in the Contract Documents, words and terms which have well-known or commonly accepted technical or construction industry meanings shall be used in the Contract Documents in accordance with such recognized meanings.

1.2.7 Every part of the Work shall be accomplished in workmanship-like manner by workers, laborers, or mechanics specially skilled in the class of work required. Any person the State may deem incompetent or disorderly shall be promptly removed from the Project by the Contractor upon written notice from the State, and shall not be re-employed on this Project.

1.3 **USE OF THE STATE'S DRAWINGS, PROJECT MANUAL AND OTHER DOCUMENTS:** The Drawings, Project Manual and other documents issued by the State, and copies furnished to the Contractor, are for use solely with respect to this Project. They are not to be used by the Contractor or any Subcontractor, Sub-subcontractor or material or equipment supplier on other projects, nor for additions to this Project outside the scope of the Work without the specific written consent of the State. The Contractor, Subcontractors, Sub-subcontractors and material or equipment suppliers are granted a limited license to use and reproduce applicable portions of the Drawings, Project Manual and other documents issued by the State appropriate to, and for use in, the execution of their work under the requirements of the Contract Documents.

1.4 CAPITALIZATION

1.4.1 Terms capitalized in the General Conditions of the Contract for Construction include those which are:

- .1 Specifically defined; or
- .2 Titles of numbered Articles; or
- .3 References to Paragraphs, Subparagraphs and Clauses; or
- .4 Titles of other documents.

1.5 CONFLICTS IN THE CONTRACT DOCUMENTS

1.5.1 In the event of conflict in the Contract Documents, the following priorities shall govern:

- .1 Addenda shall govern over other Sections of the Contract Documents to the extent specifically noted; subsequent Addenda shall govern over prior Addenda only to the extent specified.
- .2 The General Conditions of the Contract for Construction shall govern over Drawings and Specifications except for specific modifications stated in the Supplementary Conditions, and except for Addenda.
- .3 In case of conflict between the Drawings and the Specifications, the Specifications shall govern unless the requirement(s) in the Drawings is/are more stringent and/or of higher quality and/or of higher quantity.
- .4 In the case of conflict within the Drawings, the following shall govern:
 - 1) Schedules, when identified as such, shall govern over all other portions of the Drawings.
 - 2) Specific notes shall govern over other notes and all other portions of the Drawings, except schedules described in the preceding Clause.
 - 3) Larger scale Drawings shall govern over smaller scale Drawings.
 - 4) Detail Drawings shall govern over standard plates bound within the Project Manual.
 - 5) Figured or numerical dimensions shall govern over dimensions obtained by scaling.

1.5.2 Omissions: If the Contract Documents are not complete as to any minor detail or required construction system or with regard to the manner of combining or installing of parts, materials, or equipment, but there exists accepted trade standard for good and workmanlike construction, such detail shall be deemed to have been implied by the requirements of the Contract Documents in accordance with such standard.

- .1 "Minor Detail" shall include the concept of substantially identical components, where price of each such component is small even though aggregate cost or importance is substantial, and shall include a single component which is incidental, even though its cost or importance may be substantial. Quality and quantity of parts or material so supplied shall conform to trade standards and be compatible with type, composition, strength, size and profile of parts or materials otherwise set forth in the Contract Documents.

1.6 REQUESTS FOR INFORMATION, CLARIFICATION OR ADDITIONAL INSTRUCTIONS

1.6.1 Requests for Information (RFI): Should the Contractor discover conflicts, omissions, or errors in the Contract Documents, or have any questions concerning interpretation or clarification of Contract Documents, the Contractor shall immediately submit to the State in writing an RFI that complies with the following requirements:

- .1 All RFIs, whether by the Contractor, a Subcontractor or supplier at any tier, shall be submitted by the Contractor to the State.
- .2 RFIs shall be numbered sequentially and be presented in the format provided by the State.
- .3 The Contractor shall clearly and concisely set forth the single issue for which interpretation or clarification is sought, indicate Specification Section number, article and subarticle numbers, and Contract Drawing number, and detail, or other item involved, and state why a response is required from the State.
- .4 The Contractor shall set forth its own interpretation or understanding of the requirements, along with reasons why it has reached such an understanding in each RFI.
- .5 RFIs shall be submitted in a timely manner in order that they may be adequately researched and answered before the response affects any critical activity of the Work.
- .6 The State will review all RFIs to determine whether they are truly RFIs within the meaning of the term as defined in Paragraphs 1.1.33 and 1.6.1. RFI's which are determined to be not within the meaning of the term and/or RFIs where answers can readily be found in the Drawings and Project Manuals shall be deemed to be superfluous and the cost for reviewing these RFIs will be back-charged to the Contractor.
- .7 Responses to RFIs will be made within 14 days unless the State notifies the Contractor in writing that a response will take longer. The 14 days will begin when the RFI is received and dated by the State. Should the State respond sooner, the Contractor shall not assume that a new timeline has been established. Delays in the progress of the Work due to late submittal of RFIs by the Contractor are solely the responsibility of the Contractor.
- .8 Responses from the State will not change any requirement of the Contract unless so noted by the State in the response to the RFI.
- .9 Should the Contractor believe that a response to an RFI causes a change to the requirements of the Contract, the Contractor shall, before proceeding, give written notice to the State, indicating that the Contractor considers the State's response to the RFI to be a Change Order. An RFI will not be considered to be automatically a notice for a Change Order. The Contractor shall give separate written notice within 7 days of receipt of the State's response to the RFI. If the Contractor fails to give notice within 7 days or prior to commencement of the change, the Contractor shall forfeit the right to seek additional time or cost under Article 6.

1.6.2 Additional Detailed Instructions: The State may furnish additional detailed written and/or graphic instructions to further explain the work, and such instructions shall be a part of the Contract requirements. Should additional detailed instructions, in the opinion of the Contractor, constitute work in excess of the scope of the Work, the Contractor shall submit written notice to the State within 14 days following receipt of such instructions, and in any event prior to commencement of the work thereon. The State will then consider the notice; and, if in the State's judgment it is justified, the State's instructions will be revised or the extra work authorized in accordance with the provisions of Article 6.

ARTICLE 2 - ADMINISTRATION OF THE CONTRACT

2.1 INFORMATION AND/OR SERVICES REQUIRED OF THE STATE

2.1.1 Information and/or services under the State's control shall be furnished by the State within a mutually agreed upon response time so as to avoid delay in the orderly progress of the Work.

2.1.2 The Contractor will be furnished Drawings and Project Manuals as specified in the Contract Documents.

2.2 ADMINISTRATION OF THE CONTRACT

2.2.1 The State will provide administration of the Contract as described in the Contract Documents during construction, until final payment is due and during the correction period described in Paragraph 12.2 and throughout the guarantee period.

2.2.2 The State will visit the Project site appropriate to the stage of construction to become familiar with the progress and quality of the completed work and to determine if the Work is in accordance with the Contract Documents.

2.2.3 Unless so specified in the Contract Documents, the State will not have control over construction means, methods, techniques, sequences or procedures, or safety precautions and programs in connection with the Work. The State will not be responsible for the Contractor's failure to carry out the Work in accordance with the requirements of the Contract Documents. The State will not be responsible for acts, errors, or omissions of the Contractor, a Subcontractor, or anyone directly or indirectly employed by any of them, or of any other persons performing portions of the Work.

2.2.4 Communications Facilitating Contract Administration: Communications by and with the State's consultants shall be through the State. Communications by and with Subcontractors, Sub-subcontractors and material suppliers shall be through the Contractor. Communications by and with separate contractors shall be through the State.

2.2.5 If the State observes work that appears to not comply with the requirements of the Contract Documents, the State will have the authority to reject the Work. Whenever the State considers it necessary or advisable for implementation of the intent of the Contract Documents, the State will require additional inspection or testing of the Work, in accordance with Subparagraphs 3.13.2 and 3.13.3, whether or not such work is fabricated, installed or completed.

2.2.6 The State will review and take action upon the Contractor's submitted Shop Drawings, Product Data and Samples, but only for the limited purpose of checking for conformance with information given and the design concept expressed in the Contract Documents. Review of submittals is not conducted for the purpose of determining the accuracy and completeness of other details, such as dimensions and quantities, nor for substantiating instructions for installation or performance of equipment or systems, which remain the responsibility of the Contractor.

2.2.7 Substitutions and Approved Equals: Alternative material(s), article(s), or equipment that are of equal quality and of required characteristics for the purpose intended may be proposed by the Contractor. The State will examine proposed alternatives for compliance with the Contract Documents. The proposed material(s), article(s), or equipment, will be reviewed for comparative quality, suitability, and performance against the product(s) specified in the Contract Documents. Refer to Subparagraph 3.12.10, for Substitution procedures. If Contractor's substitution is accepted, the Contractor shall be responsible for the costs of any changes resulting from the substitution, including, but not limited to redesign costs of the Project.

2.2.8 The State will conduct inspections to determine the Contractor's compliance with the Contract Documents and the date of Completion; will receive, for review and record, written warranties and related documents required by the Contract Documents and assembled by the Contractor; and will issue a final Payment Authorization upon compliance with the requirements of the Contract Documents and Acceptance of the Work.

2.3 BREACHES, DEFAULTS AND TERMINATION FOR CAUSE

2.3.1 If the Director deems that the Contractor has failed to supply an adequate working force, or material of proper quality, or has failed to comply with Public Contract Code Section 10262, or has failed in any other respect to prosecute the Work with the diligence and force specified by the Contract, the Director may:

- .1 after written notice of at least 5 days to the Contractor, specifying the defaults to be remedied, provide any such labor or materials and deduct the cost from any money due or to become due to the Contractor under the Contract; or
- .2 if the Director considers that the failure is sufficient ground for such action, the Director may give written notice of at least 5 days to the Contractor and the Contractor's sureties, that if the defaults are not remedied, the Contractor's control over the Work will be terminated.

2.3.2 Should the State exercise its rights to terminate as noted in Subparagraph 2.3.1, the State may, without prejudice to any other rights or remedies of the State and subject to any prior rights of the Surety:

- .1 terminate employment of the Contractor;
- .2 take possession of the Project site, materials, equipment, tools, appliances, and construction equipment and machinery owned by the Contractor;
- .3 accept assignment of Subcontractor Agreements pursuant to Paragraph 4.4; and/or
- .4 finish the Work by whatever method(s) the State may deem expeditious and appropriate.

2.3.3 When the State terminates the Contract for reasons provided in Subparagraph 2.3.1, the Contractor shall not be entitled to receive any further payment until Completion of the Work. If the costs incurred by the State because of termination under Subparagraph 2.3.1 exceed the unpaid balance, the Contractor shall pay the difference to the State.

2.4 TERMINATION FOR THE STATE'S CONVENIENCE

2.4.1 The State reserves the right to terminate this Contract or any part thereof, due to an Act of God or for its sole convenience. In the event of such termination, the Contractor shall immediately stop hereunder and shall immediately cause its Subcontractors, Sub-subcontractors and material suppliers at any tier, to immediately stop work, leaving the site in a safe and secured condition. The Contractor shall not be paid for any work performed or costs incurred after the termination date that could have been avoided.

2.4.2 The Contractor shall be paid in accordance with the provisions of Article 8; except that the amount due the Contractor shall be based upon the State's final estimate of the Work completed, or acceptable materials furnished but not used, to the date of suspension of the Work, less any amounts required to be withheld pursuant to Article 8, and less any prior payment(s) made to, or on the account of the Contractor.

2.5 SUSPENSION BY THE STATE FOR CONVENIENCE

2.5.1 The State may, by written notice, order the Contractor to suspend, delay or interrupt the Work, in whole or in part, for such period of time as the State may determine.

2.5.2 An adjustment may be claimed by the Contractor in accordance with Article 6 and Article 7 for changes in the Work, caused by a suspension, delay or interruption. No adjustment will be made to the extent:

- .1 that Contractor's performance of the Work, is, was or would have been so suspended, delayed or interrupted by another cause for which the Contractor is responsible; or
- .2 that an equitable adjustment is made or denied under another provision of the Contract.

ARTICLE 3 - CONTRACTOR

3.1 REVIEW OF CONTRACT DOCUMENTS AND FIELD CONDITIONS BY THE CONTRACTOR

3.1.1 The Contractor shall carefully study and compare the Contract Documents with each other and shall report to the State, in writing, any errors, inconsistencies or omissions discovered. If the Contractor performs any work knowing it involves a recognized error, inconsistency or omission in the Contract Documents, without such notice to the State the Contractor shall assume responsibility for such performance and shall bear the cost for correction.

3.1.2 The Contractor shall take field measurements and verify field conditions and shall compare such field measurements, conditions and other related information known to the Contractor with the Contract Documents before proceeding.

3.1.3 The Contractor shall promptly, and before such conditions are disturbed, notify the State in writing of:

- .1 subsurface or latent physical conditions at the site differing materially from those indicated, or
- .2 unknown physical conditions at the site of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in this Contract.
- .3 Hazardous materials.

3.1.4 The State will promptly investigate the conditions, and if the State finds that such conditions do materially so differ and cause an increase or decrease in the Contractor's cost of, or the time required for, performance of any part of the Work, whether or not changed as a result of such conditions, a Change Order will be issued in accordance with Article 6.

3.2 SUPERVISION AND CONSTRUCTION PROCEDURES

3.2.1 The Contractor shall supervise and direct the Work. The Contractor shall be responsible for, and have control over, construction means, methods, techniques, sequences, procedures, safety precautions and programs in connection with the Work, and for coordinating the Work under the Contract; unless otherwise noted or specified in the Contract Documents.

3.2.2 The Contractor shall be responsible to the State for acts and omissions of the Contractor's employees, Subcontractors, Sub-subcontractors or material suppliers and their agents and employees, and other persons performing portions of the Work under a contract with the Contractor.

- .1 Subcontractor Responsibility: The Contractor shall be responsible for the actions or inaction of Subcontractors, Sub-subcontractors or material suppliers, at all tiers, regardless of whether they are a Disabled Veterans Business Enterprise (DVBE) firm or are stipulated suppliers or sole sourced. No claim, request for equitable adjustment or Change Order request shall be submitted to the State for any action of any Subcontractor, Sub-subcontractor or material supplier, at any tier, unless the Contractor can demonstrate that the State is the proximate cause of the change or delay alleged in such request. The State will not accept any responsibility or liability for any action or inaction of any Subcontractor, Sub-subcontractor or material supplier, at any tier, except to the extent that the State is the proximate cause of the change or delay.

3.2.3 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 State, the State's administration of the Contract, or by tests, inspections or approvals required or performed by persons other than the Contractor.

3.2.4 The Contractor shall be responsible for inspections of portions of the Work already completed under the Contract to determine that such portions are in proper condition to receive subsequent work. If the Contractor determines that some work performed on the Project does not comply with the requirements of the Contract Documents, the Contractor shall repair or replace such defective work at the Contractor's sole expense.

3.2.5 Until Acceptance of the Work, the Contractor shall have the charge and care thereof, and shall bear risk of injury or damage to any part of the Work by action of the elements (except for an Act of God, or natural disaster as proclaimed by the State or Federal Government), or from any other reason except for such damages as are directly caused by acts of the Federal or State Government and the public enemy, except as provided in Paragraph 8.5.

3.3 LABOR AND MATERIALS

3.3.1 Unless otherwise provided in the Contract Documents, the Contractor shall provide and pay for labor, materials, equipment, tools, construction equipment and machinery, water, heat, utilities, transportation, and other facilities and services 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. Materials, articles and equipment furnished by the Contractor for incorporation into the Work shall be new unless otherwise specified in the Contract Documents.

3.3.2 Hours of Labor: Workers are limited and restricted to 8 hours during any one calendar day, and 40 hours during any one calendar week except that pursuant to Labor Code Section 1815, any work performed in excess of 8 hours per day and 40 hours during any one week, shall be permitted upon compensation for hours worked in excess of 8 hours per day at not less than 1-1/2 times the basic rate of pay. The Contractor shall pay the State \$25 as a penalty for each worker for each calendar day worked in violation of the above limitations and restrictions.

3.3.3 Prevailing Wage: The Contractor shall comply with Labor Code, Section 1774 and 1775. Pursuant to Section 1774, the Contractor and any subcontractors, regardless of tier, shall pay not less than the specified prevailing wage rates to all workers employed in the execution of the Contract. In accordance with Section 1775, the Contractor and any subcontractor under the Contractor shall forfeit to the State not more than \$50 for each calendar day, or portion thereof, for each worker paid less than the prevailing wage rates for the work or craft, in which the worker is employed for any work executed under the Contract by the Contractor or by any subcontractor in violation of the provisions of the Labor Code; and, in particular, Labor Code, Sections 1770 to 1780, inclusive. In addition to such forfeiture, the difference between such stipulated prevailing wage rates and the amount paid to each worker for each day, or portion thereof, shall be paid to each underpaid worker by the Contractor or subcontractor. This provision shall not apply to properly registered apprentices.

- .1 Pursuant to Labor Code, Section 1770, the Director of the Department of Industrial Relations has ascertained the general prevailing rate of per diem wages and a general prevailing rate for legal holiday and overtime work for each craft required for execution of the Contract. The Contractor shall obtain copies of the prevailing rate of per diem wages from the Department of Industrial Relations, Division of Labor Statistics & Research, PO Box 420603, San Francisco, CA 94142-0603, (415) 703-4780; or wage rates may be accessed on the internet at http://www.dir.ca.gov/DLSR/statistics_research.html. The Contractor is responsible to read, understand and comply with all the guidelines, including the fine print in the prevailing wage determinations; and shall post a copy of the prevailing wage rates, specific to the Project, at the Project site.

- .2 Wage rates set forth are the minimum that may be paid by the Contractor. Nothing herein shall be construed as preventing the Contractor from paying more than the minimum rates set. No extra compensation will be allowed by the State due to the inability of the Contractor to hire labor at minimum rates, nor for necessity for payment by the Contractor of subsistence, travel time, overtime, or other added compensations, all of which possibilities are elements to be considered and ascertained to the Contractor's own satisfaction in preparing the Bid Form.
- .3 If it becomes necessary to employ crafts other than those listed in the General Prevailing Wage Rate booklet, the Contractor shall contact the Division of Labor Statistics and Research as noted above. The rates thus determined shall be applicable as minimum for the contract and incorporated in the bid. When the wage determination shows an expiration date (noted by a double asterisk**), to expire during the term of the contract, the Contractor must call or write the DIR to obtain the new rates and incorporate them in the bid to be applicable for the term of the contract.
- .4 The Contractor and each subcontractor, regardless of tier, shall keep an accurate payroll record showing the names, addresses, social security numbers, work classifications, 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 by the Contractor and/or subcontractor in connection with the Work. Payroll records shall be certified and shall be on forms provided by the Division of Labor Standards Enforcement, or shall contain the same information as those forms. The Contractor's and subcontractor's certified payroll records for each employee shall be submitted with each payment request, covering the period of the payment request.

3.3.4 Travel and Subsistence Payments: The Contractor shall pay travel and subsistence payments to persons required to execute the Work as such travel and subsistence payments are defined in applicable collective bargaining agreements filed with the Department of Industrial Relations, pursuant to Labor Code, Sections 1773.1 and 1773.9.

3.3.5 Apprentices: Properly registered apprentices may be employed in the execution of the Work. Every apprentice shall be paid the standard wage paid to apprentices under the regulations of the craft or trade at which the apprentice is employed, and shall be employed only at the work of the craft or trade to which the apprentice is registered. The Contractor and each Subcontractor shall comply with the requirements of Labor Code, Section 1777.5, and any related regulations regarding the employment of registered apprentices.

3.4 NONDISCRIMINATION CLAUSE

3.4.1 Definitions: As they pertain to the Standard California Nondiscrimination Construction Contract Specifications:

- .1 Administrator: The Administrator, Office of Compliance Programs (OCP), California Department of Fair Employment and Housing (DFEH), or any person to whom the Administrator delegates authority.
- .2 Minority includes:
 - 1) Black (all persons having primary origins in any of the Black racial groups of Africa, but not of Hispanic origin); or
 - 2) Hispanic (all persons of primary culture or origin in Mexico, Puerto Rico, Cuba, Central or South America, or other Spanish derived culture or origin regardless of race); or
 - 3) Asian/Pacific Islander (all persons having primary origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent or the Pacific Islands); or
 - 4) American Indian/Alaskan Native (all persons having primary origins in any of the original peoples of North America and who maintain culture identification through tribal affiliation or community recognition).

3.4.2 Whenever the Contractor or any Subcontractor subcontracts a portion of the Work, it shall physically include in each subcontract of \$5,000 or more, the Nondiscrimination Clause in the Contract directly or through incorporation by reference. Any subcontract for work involving a construction trade shall also include the Standard California Construction Contract Specifications, either directly or through incorporation by reference.

3.4.3 The Contractor shall implement the specific nondiscrimination standards provided in Clauses 3.4.6.1 through 3.4.6.5.

3.4.4 Neither the provisions of any collective bargaining agreement, nor the failure by a union with whom the Contractor has a collective bargaining agreement, to refer either minorities and/or women shall excuse the Contractor's obligations under these specifications, Government Code, Section 12990, or the regulations promulgated pursuant thereto.

3.4.5 In order for the nonworking training hours of apprentices and trainees to be counted, such apprentices and trainees shall be employed by the Contractor during the training period, and the Contractor shall have made a commitment to employ the apprentices and trainees upon the completion of their training, subject to the availability of employment opportunities. Trainees shall be trained pursuant to training programs approved by the U.S. Department of Labor or the California Department of Industrial Relations.

3.4.6 The Contractor shall take specific actions to implement the Contractor's nondiscrimination program. The evaluation of the Contractor's compliance with these specifications shall be based upon the Contractor's effort to achieve maximum results from the Contractor's actions. The Contractor shall be able to demonstrate fully the Contractor's efforts under Steps .1 through .5 below:

- .1 Ensure and maintain a working environment free of harassment, intimidation, and coercion at all sites and at all facilities at which the Contractor's employees are assigned to work. The Contractor, whenever possible, shall assign two or more women to each construction project. The Contractor shall specifically ensure that all leadpersons, superintendents, and other on-site supervisory personnel are aware of and carry out the Contractor's obligations to maintain such a working environment, with specific attention to minority and/or female individuals working at such sites or in such facilities.
- .2 Provide written notification within 7 days to the Director of DFEH when the union(s) with which the Contractor has a collective bargaining agreement(s) has not referred to the Contractor a minority person and/or woman sent by the Contractor, or when the Contractor has other information that the union(s) referral process has impeded the Contractor's efforts to meet the Contractor's obligations.
- .3 Disseminate the Contractor's equal employment opportunity policy by providing notice of the policy to unions and training, recruitment and outreach programs and requesting their cooperation in assisting the Contractor to meet the Contractor's obligations; and by posting the company policy on bulletin boards accessible to all employees at each location where construction work is performed.
- .4 Ensure all personnel making management and employment decisions regarding hiring, assignment, layoff, termination, conditions of work, training, rates of pay or other employment decisions, including all supervisory personnel, superintendents, general leadpersons, on-site leadpersons, etc., are aware of the Contractor's equal employment opportunity policy and obligations, and discharge their responsibilities accordingly.
- .5 Ensure that seniority practices, job classifications, work assignments and other personnel practices, do not have a discriminatory effect by continually monitoring all personnel and employment related activities to ensure that the equal employment opportunity policy and the Contractor's obligations under these specifications are being carried out.

3.4.7 Contractors are encouraged to participate in voluntary associations which assist in fulfilling their equal employment opportunity obligations. The efforts of a contractor association, joint contractor-union, contractor-community, or other similar group of which the Contractor is a member and participant, may be asserted as fulfilling any one or more of the Contractor's obligations under these specifications provided that the Contractor actively participates in the group, makes every effort to assure that the group has a positive impact on the employment of minorities and women in the industry, ensures that the concrete benefits of the program are reflected in the Contractor's minority and female work-force participation, and can provide access to documentation which demonstrates the effectiveness of actions taken on behalf of the Contractor. It is the Contractor's obligation to comply.

3.4.8 The Contractor is required to provide equal employment opportunity for all minority groups, both male and female, and all women, both minority and nonminority. Consequently, the Contractor may be in violation of the Fair Employment and Housing Act (Government Code, Section 12990 et seq.) if a particular group is employed in a substantially disparate manner.

3.4.9 Establishment and implementation of a bona fide affirmative action plan pursuant to Section 8104(b) of Title 2, California Code of Regulations (CCR), shall create a rebuttable presumption that the Contractor is in compliance with the requirements of Government Code, Section 12990, and its implementing regulations.

3.4.10 The Contractor shall not use the nondiscrimination standards to discriminate, harass or allow harassment against any person because of race, color, religion, sex, national origin, ancestry, physical disability (including HIV and AIDS), mental disability, medical condition (cancer), marital status, or age over 40, denial of family and denial of family care leave.

3.4.11 The Contractor shall not enter into any subcontract with any person or firm decertified from State contracts pursuant to Government Code, Section 12990.

3.4.12 The Contractor shall carry out such sanctions and penalties for violation of these specifications and the Nondiscrimination Clause, including suspension, termination and cancellation of existing subcontracts as may be imposed or ordered pursuant to Government Code, Section 12990 and its implementing regulations by the awarding agency. Any Contractor who fails to carry out such sanctions and penalties shall be in violation of these specifications and Government Code, Section 12990.

3.4.13 The Contractor shall designate a responsible official to monitor all employment-related activity to ensure that the company's equal employment opportunity policy is being carried out, to submit reports relating to the provisions herein as may be required by OCP, and to keep records. Records shall at least include for each employee the name, address, telephone number, construction trade, union affiliation, if any, employee identification number when assigned, social security number, race, sex, status (e.g., mechanic, apprentice

trainee, helper or laborer), dates of changes in status, hours worked per week in the indicated trade, rate of pay, and locations at which the work is performed. Records shall be maintained in any easily understandable and retrievable form; however, to the degree that existing records satisfy this requirement, the Contractor shall not be required to maintain separate records.

3.5 GUARANTEE

3.5.1 The Contractor unconditionally guarantees the Work will be completed in accordance with the requirements of the Contract Documents, and will remain free of defects in workmanship and materials for a period of 1 year from the date of Completion of the Work of the Project, unless a longer guarantee period is specifically called for in the Contract Documents. The Contractor shall repair or replace work, or adjacent work, or both, that may have been damaged or displaced, which was not in accordance with the requirements of the Contract Documents, or that may be defective in its workmanship or material within the guarantee period specified in the Contract Documents, without any expense whatsoever to the State; ordinary wear and tear and abuse excepted.

3.5.2 The Contractor further agrees, within 14 days after being notified in writing by the State, of work not in accordance with the requirements of the Contract Documents or defects in the Work, that the Contractor shall commence and execute, with due diligence, work necessary to fulfill the terms of the guarantee. If the State finds that the Contractor fails to perform the work under the guarantee, the State will proceed to have the work completed at the Contractor's expense and the Contractor will pay costs of the work upon demand. The State will be entitled to all costs, including attorney's fees necessarily incurred upon the Contractor's refusal to pay the above costs.

3.5.3 Notwithstanding the foregoing Subparagraph, in the event of an emergency constituting an immediate hazard to health or safety of State employees, property, or licensees, the State may undertake, at the Contractor's expense and without prior notice, work necessary to correct such hazardous condition(s) when it is caused by work of the Contractor not being in accordance with the requirements of the Contract Documents.

3.6 **TAXES:** The Contractor shall pay all applicable taxes for the Work, or portions thereof provided by the Contractor, which were legally enacted as of the bid date, whether or not yet effective or merely scheduled to go into effect.

3.7 PERMITS, FEES AND NOTICES

3.7.1 The Contractor shall secure and pay for required permits, governmental fees, licenses and inspections necessary to complete the Work, unless otherwise provided in the Contract Documents.

3.7.2 The Contractor shall comply with and give notices required by laws, ordinances, rules, regulations and lawful orders of public authorities bearing on the performance of the Work.

3.7.3 If the Contractor observes that portions of the Contract Documents are at variance with applicable laws, statutes, ordinances, building codes, and rules and regulations, the Contractor shall promptly notify the State in writing. If the Contractor performs work known to be contrary, or should have known to be contrary to laws, statutes, ordinances, building codes, and rules and regulations without prior notice to the State, the Contractor shall assume full responsibility for the Work and shall bear the attributable costs.

3.7.4 The Contractor is not subject to municipal, county, or district laws, rules, or regulations pertaining to building permits or regulating the design or construction of buildings upon State property, except as specified in the Contract Documents.

3.7.5 The Contractor may be subject to federal, state, municipal, county, local or district laws, rules, or regulations pertaining to off-site work, such as utility connections, fire protection systems and encroachment upon federal, state, private, city or county property, including, but not limited to storm water pollution prevention plans.

3.7.6 All construction work shall comply with the California Code of Regulations, Title 24, California Building Standards Code (CBSC), and other Applicable Codes, current edition, as of the bid date or as specified in the Specifications.

3.8 **ALLOWANCES:** The Contractor shall include in the Contract Sum, Allowances in accordance with the requirements of the Specifications, Division 01.

3.9 SUPERINTENDENT

3.9.1 The Contractor shall employ a competent Superintendent and assistants who shall be in attendance at the Project site during performance of the Work. The Superintendent, or the Contractor's duly appointed representative, shall be the person in charge of

the construction of the Work and shall represent the Contractor. Communications given to the Superintendent shall be as binding as if given directly to the Contractor. All communications shall be confirmed in writing by the Contractor. Should the State deem the Superintendent to be incompetent, the State has the authority to request the Contractor to replace this person.

3.9.2 Should the Contractor decide to replace the Superintendent, the Contractor shall notify the State in writing, no fewer than 14 calendar days prior to the replacement. The Contractor shall submit the name and resume of the new Superintendent with the letter.

3.9.3 At any other time when the Superintendent is absent from the Project site because no Work is being performed, the Superintendent shall nevertheless keep the State advised of the Superintendent's whereabouts so that the Superintendent may readily be reached and available for consultation at the Project site at any time.

3.10 CONTRACTOR'S PROGRESS SCHEDULE

3.10.1 Within the time frame specified in the specifications and prior to the first payment request, the Contractor shall submit to the State a Progress Schedule, including submittal schedules, prepared in accordance with the Specifications, Division 01. The Progress Schedule shall show the order in which the Contractor proposes to execute the Work, dates on which the Contractor will start each major subdivision of the Work, and projected dates of completion of each such subdivision in accordance with the requirements of the Contract Documents. The Contractor shall submit adjusted Progress Schedules, including submittal schedules, to reflect changed conditions in accordance with the requirements of the Contract Documents with each payment request.

3.10.2 The Contractor shall, unless otherwise specified in the Contract Documents, or directed by the State in writing, show in the schedule that physical construction of the Work will start within 10 calendar days of the start date stipulated in the Notice to Proceed, and show execution to Completion, in accordance with the specified schedule, subject to adjustment in accordance with the requirements of the Contract Documents.

3.10.3 The Contractor shall provide an adequate work force, materials of proper quality, and equipment to properly execute the Work and to ensure completion of each part in accordance with the Progress Schedule and within the Contract Time specified.

3.10.4 The Contractor shall submit to the State a Schedule of Values consistent with the Progress Schedule and Article 8. The Schedule of Values will be used as a basis for payment in accordance with Article 8.

3.10.5 The State's review and acceptance of the Progress Schedule is for compliance with the requirements of the Contract Documents only. Review and acceptance by the State of the Progress Schedule does not mean approval and does not relieve the Contractor of any of the Contractor's responsibility for the accuracy or feasibility of the Progress Schedule, or of the Contractor's ability to meet the interim Project milestone dates and the date of Completion. The State's review and acceptance does not expressly or impliedly warrant, acknowledge or admit the reasonableness of the logic, durations, manpower or equipment loading of the Progress Schedule.

3.11 DOCUMENTS AND SAMPLES AT THE PROJECT SITE

3.11.1 The Contractor shall maintain at the Project site one record copy of the Drawings, Project Manual, Addenda, Change Orders and other modifications, in good order and marked currently to record changes and selections made during construction; and in addition, Shop Drawings, Product Data, Samples and similar required submittals. These shall be available to the State and shall be delivered to the State upon completion of the Work.

3.11.2 Daily Records Clause: The Contractor shall prepare and maintain daily inspection records to document the progress of the Work on a daily basis. Daily Records shall include a daily accounting of labor and equipment on the site for the Contractor and Subcontractors, at any tier. Daily Records shall make a clear distinction between work being performed under Change Order, base scope work, and/or disputed work. Daily Records shall be copied and provided to the State at the end of every week, unless otherwise agreed to in writing.

3.12 SHOP DRAWINGS, PRODUCT DATA AND SAMPLES (SUBMITTALS)

3.12.1 Shop Drawings, Product Data, Samples and similar submittals are not Contract Documents. Their purpose is to demonstrate those portions of the work for which submittals are required and the way the Contractor proposes to conform to the information given and the design concept expressed in the Contract Documents. Review by the State is subject to the limitations of Subparagraph 2.2.6.

3.12.2 The Contractor shall review, approve and submit to the State Shop Drawings, Product Data, Samples and similar submittals required by the Contract Documents within the number of days set forth in the Specifications, Division 01; except finishes which shall be submitted in a sequence so as to cause no delay in the progress of the Work or in the activities of the State or separate

contractors. Submittals that are not required by the Contract Documents may be returned to the Contractor without action.

3.12.3 The Contractor shall perform no portion of the Work requiring submittal and review of Shop Drawings, Product Data, Samples or similar submittals until the respective submittal has been reviewed by the State. Such work shall be in accordance with reviewed submittals.

3.12.4 By submitting Shop Drawings, Product Data, Samples and similar submittals, the Contractor represents that the Contractor has determined and verified materials, field measurements and related field construction criteria, and has checked and coordinated the information contained within the submittal(s) with the requirements of the Contract Documents.

3.12.5 The Contractor shall not be relieved of the responsibility for any deviation from the requirements of the Contract Documents by the State's review of submittals unless the Contractor has specifically informed the State, in writing, or as directed by the State, of such deviation at the time of submittal, and the State has given written consent to the specific deviation. The State's review shall not relieve the Contractor of responsibility for errors or omissions in submittals. Any resulting cost increase due to such a deviation shall be the sole responsibility of the Contractor.

3.12.6 The Contractor shall respond per requirements of the Contract Documents, in writing or on resubmitted submittals, to revisions other than those requested by the State on previous submittals. After the second resubmittal of a specific item, that is still not accepted, the Contractor will be charged all costs of submittal review. The charges will be deducted from the Contract Sum.

3.12.7 Informational submittals on which the State is not expected to take action, may be identified in the Contract Documents.

3.12.8 When professional certification of performance criteria of materials, systems or equipment is required by the Contract Documents, the State will be entitled to rely upon the accuracy and completeness of such calculations and certifications.

3.12.9 When descriptive catalog designations, including manufacturer's name, product brand name, or model number(s) are referred to in the Contract Documents, such designations shall be considered as being those found in industry publications of current issue at date of first Invitation to Bid.

3.12.10 Substitutions and Approved Equals: Alternative material(s), article(s), or equipment that are of equal quality and of required characteristics for the purpose intended may be proposed by the Contractor for use in the Work, provided the Contractor complies with the Specifications, Division 01, and the following requirements:

- .1 The Contractor shall submit a proposal for the alternative material(s), article(s), or equipment, in writing, within 35 days after Contract start date stated in the Notice to Proceed. In exceptional cases where the best interests of the State so require, the State may give written consent to a submittal or resubmittal received after expiration of the time limit designated.
- .2 The proposal will not be considered unless the submittal is accompanied by complete information and descriptive data necessary to determine equality of offered material(s), article(s), or equipment. Samples shall be provided when requested by the State. Burden of proof as to comparative quality, suitability, and performance of offered material(s), article(s), or equipment shall be upon the Contractor. The State will be the sole judge as to such matters. In the event the State rejects the use of such alternative(s) submitted, then one of the particular products originally specified in the Contract Documents shall be furnished.
- .3 If mechanical, electrical, structural, or other changes are required for installation, fit of alternative materials, articles, or equipment, or because of deviations from Contract Drawings and Specifications, such changes shall not be made without consent of the State, and shall be made without additional cost to the State.

3.13 TESTS AND INSPECTIONS

3.13.1 The Contractor shall at all times permit the State, its agents, officers, and employees to visit the Project site and inspect the Work, including shops where work is in preparation. This obligation shall include maintaining proper facilities and safe access for such inspection. Including, but not limited to providing lifts, ladders, scaffolds, platforms and paths of travel. When the Contract Documents require a portion of the Work to be tested, such portion of work shall not be covered up until inspected and approved by the State. The Contractor shall be solely responsible for notifying the State where and when the work is ready for inspection and testing. Should any work be covered without the required testing and approval, such work shall be uncovered and recovered at the Contractor's expense. Whenever the Contractor intends to perform work on Saturday, Sunday, or a legal holiday, the Contractor shall give written notice to the State of such intention at least 48 hours prior to performing the Work, so that the State may make necessary arrangements.

3.13.2 If the State determines that portions of the Work require additional testing, inspection or approval not included in the Contract Documents, the State will instruct the Contractor, in writing, to make arrangements for additional testing, inspection or

approval by an entity acceptable to the State, and the Contractor shall give 48 hours written notice to the State of where and when tests and inspections will be conducted so that the State may observe the procedures. The State will bear the costs except as provided in Subparagraph 3.13.3.

3.13.3 If procedures for testing, inspection or approval under Subparagraphs 3.13.1 and 3.13.2 reveal failure of a portion(s) of the Work to comply with the Contract Documents, the Contractor shall bear all costs made necessary by such failure(s) including those of repeated procedures and compensation for the State's services and expenses.

3.13.4 Required certificates of testing, inspection or approval shall, unless otherwise required by the Contract Documents, be secured by the Contractor and delivered to the State within 14 days after each test.

3.14 USE OF PROJECT SITE

3.14.1 The Contractor shall confine operations at the Project site to areas permitted by law, ordinances, permits and the Contract Documents.

3.14.2 The Contractor shall perform no operations of any nature on or beyond the limits of Work or premises, except as such operations are authorized in the Contract Documents, or authorized by the State.

3.14.3 The Contractor shall ensure the limits of Work to be free of graffiti or other similar defacements during the time of the Contract; if such defacement occurs, then the Contractor shall properly remove, repair, or correct the affected area(s), or as otherwise directed by the State. The Contractor shall protect exposed surfaces within the limits of Work, with anti-graffiti coatings, and maintain such protection continuously effective during the time of the Contract.

3.14.4 Prohibitions: Pursuant to Subparagraph 3.2.2., the use of alcohol and tobacco products, and the use or possession of weapons, or illegal controlled substances by the Contractor, or others under the Contractor's control, on State property is not allowed. Residing on site in temporary facilities by the Contractor, or others under the Contractor's control, is not allowed unless otherwise specified in the Specifications, Division 01.

3.15 CUTTING AND PATCHING

3.15.1 The Contractor shall be responsible for cutting, fitting or patching as required to complete the Work.

3.15.2 The Contractor shall not damage nor endanger the Work by cutting, patching or otherwise altering the construction, and shall not cut nor otherwise alter the construction without prior written consent of the State.

3.16 CLEANING UP

3.16.1 The Contractor shall keep the Project site and surrounding areas free from waste materials and/or rubbish caused by operations under the Contract and at other times when directed by the State. At all times while finish work is being accomplished, floors shall be kept clean, free of dust, construction debris and trash. Upon completion of the Work, the Contractor shall remove from the Project site the Contractor's tools, construction equipment, machinery, and any waste materials not previously disposed of, leaving the Project site thoroughly clean, and ready for the State's final inspection.

3.16.2 If the Contractor fails to clean up as provided in the Contract Documents, the State may do so and charge the cost thereof to the Contractor.

3.17 **ACCESS TO WORK:** The Contractor shall provide the State continuous and safe access to the Work. Including, but not limited to providing lifts, ladders, scaffolds, platforms and paths of travel.

3.18 **ROYALTIES AND PATENTS:** The Contractor shall pay royalties and license fees. The Contractor shall defend suits or claims for infringement of patent rights and hold the State harmless.

3.19 INDEMNIFICATION

3.19.1 **Duty To Defend:** To the fullest extent permitted by law, the Contractor shall defend the State and any officer or employee of the State from and against suits filed against the State alleging claims, (including costs of attorneys fees) by reason of liability imposed by law and claims, including but not limited to, claims of personal injury, death, damage to property and loss of use thereof, or any claims arising out of the Contractor's performance of the Contract, or damages of other relief based on allegations of the failure of the Contractor, or the Contractor's Subcontractors to properly perform their obligations under the Contract, of the Contractor's violations of any legal duties, even if the allegations of any suit are groundless, false or fraudulent, and the Contractor

may make such investigation and settlement of any suit as the Contractor deems expedient. This duty to defend is separate and independent from the Contractor's duty to indemnify and hold harmless the State from such claims. Any failure to fulfill this obligation shall be a default of the Contractor's performance obligations under the Contract.

3.19.2 Duty to Indemnify: To the fullest extent permitted by the law, the Contractor shall hold harmless and indemnify the State and any officer or employee of the State from and against claims, losses and expenses (including costs of attorneys fees) by reason of liability imposed by law for claims, including but not limited to, claims of personal injury, death, damage to property and loss of use thereof, or any claims arising out of the Contractor's performance of the Contract, or damages or other relief based on allegations of the failure of the Contractor, or the Contractor's Subcontractors to properly perform their obligations under the Contract, or the Contractor's violations of any legal duties. Any failure to fulfill this obligation shall be a default of the Contractor's performance obligations under the Contract.

3.20 AIR POLLUTION: The Contractor and Subcontractors shall comply with State and/or local air pollution control rules, regulations, ordinances, and statutes that apply to work performed under the Contract. If there is a conflict between the State and local air pollution control rules, regulations, ordinances and statutes, the most stringent shall govern.

3.21 CERTIFICATION BY CONTRACTOR OF RECYCLED CONTENT: The Contractor shall certify in writing, under penalty of perjury, to the State, the minimum, if not exact, percentage of recycled content, both postconsumer material and secondary material, as defined in Public Contract Code Sections 12153 and 12200 and 12209, in materials, goods, or supplies offered or products used in the performance of the Contract, regardless of whether the product meets the required recycled percentage as defined in Sections 12153 and 12200 and 12209. The Contractor may certify that the product contains zero recycled content.

3.22 UNFAIR BUSINESS PRACTICES: The Contractor agrees and will require the Subcontractors and suppliers to agree to assign to the State all rights, title, and interest in and to all causes of action they may have under Section 4 of the Clayton Act (15 U.S.C. Section 15), or under the Cartwright Act (commencing with Section 16700 of the Business and Professions Code), arising from the purchase of goods, services or materials, pursuant to the Contract Documents or subcontract thereunder. An assignment made by the Contractor, and additional assignments made by Subcontractors and suppliers, shall be deemed to have been made and will become effective at the time the State tenders final payment to the Contractor, without further acknowledgment of the parties.

3.23 CHILD SUPPORT COMPLIANCE ACT: For any contract in excess of \$100,000, the Contractor acknowledges in accordance with Public Contract Code Section 7110, that: (a) the Contractor recognizes the importance of child and family support obligations and shall fully comply with all applicable state and federal laws relating to child and family support enforcement, including, but not limited to, disclosure of information and compliance with earnings assignment orders, as provided in Chapter 8 (commencing with Section 5200) of Part 5 of Division 9 of the Family Code; and (b) the Contractor, to the best of its knowledge is fully complying with the earnings assignment orders of all employees and is providing the names of all new employees to the New Hire Registry maintained by the California Employment Development Department.

3.24 NOT USED

3.25 CONTRACTOR REQUIRED NOTIFICATION OF CHANGES: The Contractor shall notify the State's Representative in writing of any change to Contractor's name, status, or information including but not limited to:

1. Name
 - a. An amendment is required to change the Contractor's name as listed on this Agreement. Upon receipt of Contractor's notification and legal documentation of the name change, the State will process the amendment. Payment of invoices presented with a new name cannot be paid prior to approval of said amendment.
 - b. The State shall not be liable for penalties or interest on payments which are delayed due to Contractor's change of name and subsequent amendment processing.
2. Address/Location
3. Federal Employer Identification Number (FEIN)
4. Type of Organization or Legal Status – including:
 - a. Corporate
 - b. Partnership
 - c. Individual/Sole-Ownership
 - d. Joint Venture
 - e. Limited Liability Company
 - f. DBA
5. Ownership
6. Officers or Key Personnel
7. License
8. Other (Bankruptcy, Etc.)

Contractor shall immediately provide an updated Standard Form 204 (IRS/FTB form) to the Contracts Management & Procurement Services Section within five (5) calendar days of any such relevant change.

The State shall not be liable for penalties or interest on payments which are delayed do to Contractor's lack of proper or timely notice and documentation of a relevant change in status which impacts the State's ability to pay.

Contractor shall submit the firm's status change in writing including the Contract Number, Project Title and all necessary backup and legal documentation to support the status change to:

The State Department of General Services
Real Estate Services Division
Contracts Management & Procurement Services Section
707 Third Street, Suite 2-350
West Sacramento, CA 95605

ARTICLE 4 - SUBCONTRACTORS

4.1 SUBLETTING AND SUBCONTRACTING

4.1.1 The Contractor shall adhere to the rules governing subcontracting as set forth in the Subletting and Subcontracting Fair Practices Act, commencing with Public Contract Code, Section 4100. Subcontractor substitutions shall be in accordance with provisions of the Subletting and Subcontracting Fair Practices Act, beginning with Public Contract Code, Section 4100. Violations of this Act by the Contractor may subject the Contractor to penalties and disciplinary action as provided by the Subletting and Subcontracting Fair Practices Act.

4.1.2 The Contractor shall be responsible for the Work. Persons engaged in the Work of the Project are the responsibility and under the control of the Contractor. The Contractor shall give personal attention to fulfillment of the Contract and shall keep the Work under the Contractor's control. When any Subcontractor fails to execute a portion of the Work in a manner satisfactory to the State, the Contractor shall remove such Subcontractor immediately upon written request notice from the State, and the Subcontractor shall not again be employed on the Project. Although Specification Sections of the Contract Documents may be arranged according to various trades or general grouping of work, the Contractor is not obligated to sublet work in any manner. The State will not entertain requests to arbitrate disputes among Subcontractors or between the Contractor and Subcontractor(s) concerning responsibility for performing any part of the Work.

4.1.3 The State may not permit a contractor or subcontractor who is ineligible to bid or work on, or be awarded, a public works project pursuant to Sections 1777.1 or 1777.7 of the Labor Code to bid on, be awarded, or perform work as a subcontractor on a public works project.

- .1 Any contract on a public works project entered into between a contractor and a debarred subcontractor is void as a matter of law. A debarred subcontractor may not receive any public money for performing work as a subcontractor on a public works contract, and any public money that may have been paid to a debarred subcontractor by a contractor on the project shall be returned to the awarding body. The Contractor shall be responsible for the payment of wages to workers of a debarred subcontractor who has been allowed to work on the Project.

4.2 SUBCONTRACTUAL RELATIONS

4.2.1 The Contractor shall make available to each proposed Subcontractor, prior to the execution of a Subcontractor 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 Subcontractor Agreement which may or may not be at variance with the Contract. Subcontractors shall similarly make copies of applicable portions of such documents available to their respective proposed Sub-subcontractors. The Contractor shall, by Subcontractor Agreement, require each Subcontractor, to the extent of the work to be performed by the Subcontractor:

- .1 To be bound to the Contractor by terms of the Contract.
- .2 To assume toward the Contractor the obligations and responsibilities which the Contractor, by the Contract, assumes toward the State.
- .3 To preserve and protect the rights of the State under the Contract Documents with respect to the work to be performed by the Subcontractor.
- .4 To be allowed, unless specifically provided otherwise in the Subcontractor Agreement, the benefits of rights, remedies and redress against the Contractor that the Contractor, by the Contract, has against the State.
- .5 To enter into similar agreements with Sub-subcontractors.

4.2.2 Subcontractor Payments: The Contractor shall pay the Contractor's Subcontractors for work performed no later than 10 days after receipt of each progress payment. If there is a good faith dispute over all or any portion of the amount due a Subcontractor on a progress payment, the Contractor may withhold no more than 150 percent of the disputed amount. This provision shall apply to Sub-subcontractors also. A violation of these requirements invokes the payment and penalty provisions of Public Contract Code, Section 10262 and Section 10262.5.

4.3 **DISABLED VETERAN BUSINESS ENTERPRISE PROGRAM:** Pursuant to Public Contract Code (PCC) Section 10115 et. seq., the Contractor shall use, employ and utilize Disabled Veteran Business Enterprise (DVBE) subcontractors, sub-subcontractors or material suppliers who were listed in their bid documents for DVBE Program participation, to the full extent of the amount of money and/or percentage of commitment manifested in the bid documents. If the Contractor wishes to substitute any listed DVBE subcontractors, sub-subcontractors or material suppliers for just and legal cause, the Contractor shall follow the dictates of PCC Sections 4107 and 10115.12b, as well as Military and Veterans Code (M&VC) Section 999.5(e) and California Code of Regulations, Title 2, Section 1896.64. The DVBE may only be replaced by another DVBE and shall obtain the written authorization of the State prior to any such substitutions. The Contractor shall not unilaterally substitute a listed DVBE subcontractor, sub-subcontractor or material supplier. Failure of Contractor to seek substitution and adhere to the DVBE participation requirement identified in the bid may be cause for contract termination, recovery of damages under rights and remedies due to the State, and penalties as outlined in M&VC Section 999.9; PCC Sections 4110 and PCC Section 10115.10.

4.4 **CONTRACT ASSIGNMENTS:** Performance of the Contract may not be assigned except upon written consent of the State. Consent will not be given to an assignment which would relieve the Contractor or the Contractor's Surety of their responsibilities under the Contract.

ARTICLE 5 - CONSTRUCTION BY THE STATE OR BY SEPARATE CONTRACTORS

5.1 STATE'S RIGHT TO PERFORM CONSTRUCTION AND TO AWARD SEPARATE CONTRACTS

5.1.1 The State reserves the right to perform work or operations related to the Project with the State's own work force, and to award separate contracts in connection with other portions of the Project, and other construction or operations on the Project site or adjacent to the Project. The Contractor shall at all times conduct the Work so as to impose no hardship on the State or others engaged in work on the Project, nor to cause any unreasonable delay or hindrance to the Project.

5.1.2 When separate contracts are awarded for different portions of the Project, "the Contractor" in the Contract Documents in each case shall mean the contractor who executes each separate contract. Each contractor is the intended third part beneficiary of other contracts for the Project.

5.1.3 The Contractor shall not cause unnecessary hindrance or delay to another contractor working on or near the Project. If the performance of any contract for the Project is likely to be interfered with by the simultaneous execution of some other separate contract or contracts, the State will decide which contractor may proceed.

5.1.4 Costs caused by defective or ill-timed work shall be borne solely by the responsible contractor.

5.2 MUTUAL RESPONSIBILITY

5.2.1 The Contractor shall cooperate fully with the State and separate contractors with regard to the execution of their work as follows:

- .1 The Contractor shall cooperate fully with the State and all separate contractors with regard to introduction and storage of their materials and equipment.
- .2 The Contractor shall coordinate with the State and separate contractors with regard to construction scheduling and sequence of operations, subject to approval of the State.
- .3 Each contractor shall monitor the schedule and progress of each other contractor whose work affects its work, and shall provide timely notice to the State of potential problems of interface so that the State can mitigate the problem.
- .4 The Contractor shall properly connect the Work to the work of the State or the separate contractors.
- .5 The Contractor shall inspect the work of the State or other contractors affecting the Work and promptly report to the State in writing irregularities or defects in the separate work, which renders it unsuitable for reception or connection of the Work.
- .6 Failure of the Contractor to inspect and report shall constitute acceptance of the other work as fit and proper to receive the Work, except as to defects which may develop in the other work after execution of the Contractor's Work.

5.2.2 Claims Between Separate Contractors:

- .1 Should the Contractor cause damage to the work or property of any separate contractor on the Project, the Contractor shall, upon due notice, settle with such other contractor by agreement, mediation or arbitration, if they will so settle.
- .2 If such separate contractor sues the State or initiates an arbitration proceeding on account of any damage alleged to have been so sustained, the State will notify the Contractor who shall defend such proceedings at the Contractor's sole expense.
- .3 The Contractor shall pay or satisfy any judgement or award against the State, arising therefrom. In addition, the Contractor shall pay the State for attorney's fees, court, arbitration or mediation costs and additional administrative, professional, consultant, inspection, testing and other service costs which the State has incurred.

5.2.3 The Contractor shall promptly remedy damage wrongfully caused by the Contractor to any completed or partially completed construction or to any property of the State or separate contractors as provided in Subparagraph 10.1.6.

5.2.4 Cutting and Patching Under Separate Contracts: The Contractor shall be responsible for any cutting, fitting and patching that may be required to complete the Work, except as otherwise specifically provided for in the Contract Documents. The Contractor shall not endanger any work of the State or of any other contractor by cutting, excavating, or otherwise altering any work, except with the written consent of the State.

5.3 **STATE'S RIGHT TO CLEAN UP:** If a dispute arises among the Contractor, separate contractors and/or the State as to the responsibility under their respective contracts for maintaining the Project site and surrounding areas free from waste materials and rubbish as described in Paragraph 3.16, the State may clean up and allocate the costs among those responsible.

ARTICLE 6 - CHANGES IN THE WORK

6.1 GENERAL

6.1.1 The State may order changes, including but not limited to, revisions to the Contract Documents, performance of extra work, and the elimination of work, without invalidating the Contract. Orders for such changes will be in writing. Changes shall not affect the obligations of the sureties on the contract bonds nor require their consent. Contract Time and Contract Sum will be adjusted, by written Change Order for changes which materially increase or decrease the time or cost or performance.

- .1 Proposed Change Order: The Contractor will be issued a written proposed Change Order by the State describing the intended changes to the Work.
- .2 Timeline: Within 14 days the Contractor shall submit to the State the Contractor's proposed cost estimate to be added or deducted from the Contract Sum due to the change, authenticated in full by completely detailed estimates and other authenticators of the cost by the Contractor, Subcontractors, Sub-subcontractors, vendors or material suppliers, and any adjustments of time of Completion of the entire Work that is directly attributable to the State's proposed Change Order.
- .3 Agreement: If an agreement is reached as to the adjustment in compensation for performance of changed Work, but an agreement is not reached as to the adjustment of Time for such Work, then the Contractor shall proceed with the Work at the agreed cost, reserving to the Contractor the right to further pursue the Contractor's claim for adjustment of time in accordance with Paragraphs 7.4 and 9.1.
- .4 Failure to Submit Cost Estimate: If the Contractor fails to submit the cost estimate within the 14 days timeline, or there is failure to agree to the Cost, then the State shall have the right to issue an order in writing to the Contractor to commence Work immediately, and the Contract Sum shall be changed in accordance with the State's estimate of cost, unless, within 14 days following completion of the added Work or with written notice to delete the Work, the Contractor submits to the State written proof that the State's estimate is in error.

6.1.2 The Contractor, when ordered by the State, shall proceed with changes before agreement is reached on adjustment, if any, in compensation or time for performance, and shall furnish to the State records as specified in Clause 6.2.1.3. If the Contractor fails to provide such records, the State's records will be used for the purpose of adjustment, if any, in Contract Time and Contract Sum.

- .1 Contractor may make payment requests for such work.

6.1.3 The Contractor will forfeit compensation for cost and /or time for proceeding with changes to the Work without written authorization from the State. The Contractor shall notify the State, in writing, and request an evaluation whenever it appears a change is necessary. This written notice shall be made within 24 hours of such discovery. If the State concurs with the Contractor's request for a change to the Work, the State will follow the procedures under Article 6. Delays as a result of these requests will be the

responsibility of the Contractor.

6.2 CHANGE ORDER

6.2.1 Methods used in determining adjustments to the Contract Sum shall be based on one of the following methods:

- .1 By mutual acceptance of a lump sum increase or decrease in costs. Upon the State's written request, the Contractor shall furnish a detailed estimate of increase or decrease in costs, together with cost breakdowns and other support data within the time specified in such request. The Contractor shall be responsible for any additional costs caused by the Contractor's failure to provide the estimate within the time specified.
- .2 By the State, on the basis of the State's estimate of increase or decrease in the costs.
- .3 By the State, whether or not negotiations are initiated as provided in Clause 6.2.1.1, by actual and necessary costs, as determined by the State, on the basis of records. Beginning with the first day and at the end of each day, the Contractor shall furnish to the State detailed hourly records for labor, construction equipment, and services; and itemized records of materials and equipment used that day in performance of the changes. Such records shall be on a form acceptable to the State. Such records shall be signed by the Contractor and, when agreed to by the State, will become the basis for compensation for the changed work. Such agreement shall not preclude subsequent adjustment based upon later audit by the State.
- .4 By unit prices stated in the Contract Documents, or subsequently agreed upon.
- .5 By a manner agreed upon by the State and the Contractor.

6.2.2 Allowable Costs: The only costs which will be allowed due to changes in the Work shall be computed in the following manner:

- .1 Labor: Compensation for labor shall include the applicable payroll cost for labor, including first level supervision providing physical construction labor directly engaged in performance of the changes. Others, who may be involved in the preparation of the change order, including, but not limited to supervisors, superintendent, engineers, or estimators, shall be considered as overhead costs under Clause 6.2.2.4. Payroll cost for labor shall be the General Prevailing Wage Rates applicable for this project and in the locality for performance of the changes. In addition to the published rates, only social security, worker compensation, state and federal taxes shall be included in the total payroll cost. Other costs shall be considered as mark-ups under Clause 6.2.2.4. Use of a classification which would increase labor costs will not be permitted.
- .2 Materials and Equipment: Compensation for materials and equipment shall include the necessary costs for materials and equipment directly required for performance of the changes. Cost of materials and equipment may include costs of transportation and delivery. If discounts by suppliers are available to the Contractor, they shall be credited to the State. If materials and equipment are obtained from a supply or source owned by, or in part, by the Contractor, payment therefore will not exceed current wholesale prices for such materials and equipment. If, in the opinion of the State, the cost of materials and equipment is excessive, or if the Contractor fails to furnish satisfactory evidence of costs from supplier, the cost of materials and equipment shall be the lowest current wholesale price at which similar materials and equipment are available in quantities required. The State reserves the right to furnish materials and equipment required for performance of the changes, and the Contractor shall have no claim for costs or mark-ups on such materials and equipment.
- .3 Construction Equipment:
 - .1 Compensation for construction equipment shall include the necessary costs for use of construction equipment directly required for performance of the changes. Any use for less than 30 minutes shall be considered one-half hour. No costs will be allowed for time while construction equipment is inoperative, idle, or on stand-by, for any reason, unless such times have been approved in advance by the State. Rental time for construction equipment moved by its own power shall include the time required to move construction equipment to the Work site from the nearest available source for rental of such equipment, and time required to return such equipment to the source. If construction equipment is not moved by its own power, loading and transportation costs will be paid in lieu of such rental time. Neither moving time nor loading and transportation costs will be allowed if the construction equipment is used for any work other than the changes. No allowance will be made for individual pieces of construction equipment and tools having a replacement value of \$500 or less. No construction equipment costs will be recognized in excess of rental rates established by distributors or equipment rental agencies in the locality for performance of the changes.
 - .2 Unless otherwise approved by the State, the allowable rate for use of construction equipment shall constitute full compensation to the Contractor for cost of fuel, power, oil, lubrication, supplies, necessary attachments, repairs and maintenance of any kind, depreciation, storage, insurance, labor except for construction equipment operators and any and all costs to the Contractor incidental to the use

of such construction equipment.

- .4 Mark-Ups for Added Work:
 - .1 General: The following allowance for mark-ups for performance of the changes shall constitute full compensation for additional field and home office overhead, profit, insurance, taxes (excluding sales taxes for materials incorporated into the project), and bonds, and other costs not covered under Clauses 6.2.2.1 through 6.2.2.3.
 - .2 Contractor: When work is added, the Contractor may claim mark-up in addition to authorized allowable costs, a reasonable sum as compensation for the items identified in 6.2.2.4.1 above, subject to proof of entitlement based on actual job costs, actual job experience, the Contractor's bidding data, and industry custom and practice. Under no circumstance can this sum exceed the following percentages:
 - .1 Contractor Labor : 21 percent, includes bond cost.
 - .2 Contractor Materials and Equipment : 16 percent, includes bond cost.
 - .3 Subcontractor Work : 6 percent of Subcontractor's costs, includes bond cost.
 - .1 Calculations of the Contractor's allowable 6 percent mark-up of the Subcontractor's Work shall not include the Subcontractor's allowable mark-up. Compounding of mark-up is not allowed.
 - .3 Subcontractors: When work is added, the Subcontractor may claim mark-up in addition to authorized allowable costs, a reasonable sum as compensation for the items identified in 6.2.2.4.1 above, subject to proof of entitlement based on actual job costs, actual job experience, the Subcontractor's bidding data, and industry custom and practice. Under no circumstance can this sum exceed the following percentages:
 - .1 Subcontractor Labor : 20 percent
 - .2 Subcontractor Materials and Equipment : 15 percent
 - .3 The aggregate mark-ups for all Subcontract tiers shall not exceed 20 percent for labor and 15 percent for materials and equipment. Compounding of mark-up is not allowed.
- .5 For Deleted Work: When the State is entitled to a credit for deleted work, the credit shall include direct labor, materials, and supervision plus overhead of the Contractor or Subcontractor, as applicable for the deleted work. Deleted overhead shall be computed as no less than 5 percent of the direct labor, materials, and supervision, and should reflect the actual savings to the Contractor resulting from the deletion based upon actual job prices for the work at issue, actual job experience, the Contractor's bidding data for the project and industry custom and practice. For example, if a \$10,000 item of work is deleted, the credit to the State would be no less than \$10,500.
- .6 For Combination of Added and Deleted Work: For Change Orders that involve both added and deleted work, the Contract Sum will be adjusted based on the following computation: Cost before mark-ups of added and deleted work shall each be separately estimated. If a difference between costs results in an increase to the Contract Sum, a mark-up for added work shall be applied to the difference. If a difference in costs results in a decrease, then the 5 percent credit to the State for deleted overhead set forth above shall be applied to the difference.
- .7 General Limitations: Costs to the Contractor for changes which exceed market values prevailing at the time of the change will not be allowed unless the Contractor establishes that all reasonable means for performance of the changes at prevailing market values have been investigated and the excess cost could not be avoided. Notwithstanding actual charges to the Contractor on work performed or furnished by others, no mark-ups will be allowed in excess of those specified in Clause 6.2.2.4 above.

6.2.3 Cost Disallowance: Costs which will not be allowed or paid in Change Orders or Claim settlements under this Contract include, but are not limited to, interest cost of any type other than those mandated by statute; Claim preparation or filing costs; legal expenses; the costs of preparing or reviewing proposed Change Orders or Change Order proposals concerning Change Orders which are not issued by the State; lost revenues; lost profits; lost income or earnings; rescheduling costs; costs of idled equipment when such equipment is not yet at the site or has not yet been employed on the Work; lost earnings or interest on unpaid retainage; claims consulting costs; the costs of corporate officers or staff visiting the site or participating in meetings with the State; any compensation due to the fluctuation of foreign currency conversions or exchange rates; or loss of other business.

6.3 **ACCEPTANCE OF CHANGE ORDERS:** The Contractor's written acceptance of a Change Order shall constitute final and binding agreement to the provisions thereof and a waiver of Claims in connection therewith, whether direct, indirect, or consequential in nature.

6.4 **EFFECT ON SURETIES:** Alterations, extensions of time, extra and additional work, and other changes authorized by the Contract Documents may be made without securing consent of Surety(s) on Contract Bonds.

ARTICLE 7 - TIME

7.1 NOTICE TO PROCEED

7.1.1 The Contractor will be notified of the Contract start date as stated in the Notice to Proceed. Notwithstanding other provisions of the Contract, the State will not be obligated to accept or to pay for work furnished by the Contractor prior to the start date stated in the Notice to Proceed whether or not the State has knowledge of the furnishing of such work. The Contractor shall not be allowed on the site of the Work until the Contractor's Contract bonds and certificates of insurance comply with requirements of the Contract.

7.1.2 Work under the Contract shall be conducted in accordance with Paragraph 3.10. The Contractor shall not begin any Work until authorized in writing by the State.

7.2 **CONTRACT TIME:** The Contract Time is the period set forth in Document 00 73 00, Supplementary Conditions. The start and completion dates will be stated in a Notice to Proceed. It is essential that the Project be completed within the time fixed for Completion in Document 00 73 00 or liquidated damages will be assessed for delay. All portions of the Work shall be completed and shall be ready for full use by the State on, or prior to, the date of Completion.

7.2.1 Time is of the essence in this Contract.

7.3 **LIQUIDATED DAMAGES:** For every day that the Work remains unfinished after the time fixed for Completion in the Contract Documents, as modified by any approved extension of time, damage will be sustained by the State. Because of the difficulty in computing actual material loss and disadvantages to the State, it is determined in advance that the Contractor will pay the State the amount of damages set forth in the Agreement, as representing a reasonable forecast of actual damages which the State will suffer by failure of Contractor to complete the Work within the time fixed for Completion in the Contract. Execution of the Agreement shall constitute acknowledgment by the Contractor that the Contractor agrees that the State will actually suffer damages in the amount fixed for every Day during which Completion of the Work is avoidably delayed beyond the time fixed for Completion in the Contract.

7.4 TIME EXTENSIONS

7.4.1 Request for Time Extension: In the event the Contractor requests an extension of Contract Time for unavoidable delay, the Contractor shall furnish such justification and supporting evidence as the State may deem necessary for the determination as to whether the Contractor is entitled to an extension of Contract Time. The Contractor shall submit justification in writing no later than 7 days after the initial occurrence of any delay. The justification shall be based on the Official Progress Schedule as updated at the time of occurrence of the delay or execution of work related to any changes to the scope of the Work. The justification shall include, but is not limited to the following information:

- .1 Duration to perform activity(ies) relating to changes in the Work and resources (manpower, equipment, material, etc.) required to perform these activities within the stated duration.
- .2 Logical ties to the Official Progress Schedule for proposed changes or delay showing activity(ies) in the schedule start or completion dates are affected by the change or delay.

7.4.2 The State, upon receipt of such justification and supporting evidence, shall make its finding of fact. The State's decision shall be final and conclusive and the State will advise the Contractor in writing of such decision. If the State finds that the Contractor is entitled to an extension of Contract Time, the State's determination as to the total number of extension days shall be based upon the latest updated version of the Official Progress Schedule. Such data will be included in the next monthly updating of the schedule.

7.4.3 Time Extensions: For delays that the State agrees are unavoidable, and are Justified in accordance with Subparagraph 7.5.2, the Contractor shall, pursuant to the Contractor's application, be allowed an extension of time beyond the Contract Time. During such extension of time, neither extra compensation for engineering and inspection nor liquidated damages will be charged to the Contractor. Time extensions shall be granted only for delays or changes that extend the Completion date, based on the latest accepted updated version of the Official Progress Schedule. Time extensions for delays and changes shall not exceed one day for each day that the Contract Completion date of the Official Progress Schedule is extended by this change or delay.

7.5 DELAYS IN COMPLETION OF THE WORK

7.5.1 Notice of Delays: Whenever the Contractor foresees delay in the continuance and Completion of the Work, or immediately upon the occurrence of any delay which the Contractor regards as unavoidable, the Contractor shall notify the State in writing, in a separate notice of the delay. The Contractor's notice shall include the probability of the occurrences of such delay and its cause in

order that the State may take immediate steps to prevent the occurrence or continuance of the delay. If the delay cannot be prevented, the State will determine whether the delay is unavoidable and to what extent continuance and Completion of the Work is anticipated to be delayed.

- .1 The Contractor shall make no claim for delay not called to the attention of the State in writing, at the time of its occurrence.
- .2 Delay in the continuance of parts of the Work that does not prevent or delay the continuance of other parts of the Work or the Completion of the whole Work within the Contract Time shall be deemed to constitute neither avoidable delays nor unavoidable delays, within the meaning of the Contract. Such delay will be considered Unjustified and no extension to the Contract Time and/or additional compensation will be granted.

7.5.2 Justified Delay: Justified Delay in the continuance or Completion of the Work shall include delays which result from causes beyond the control of the Contractor and which could not have been avoided by the exercise of due care and diligence on the part of the Contractor or the Contractor's Subcontractors. Delay in Completion of the Work due to Contract modifications ordered by the State and unforeseeable delays in continuance or completion of the work of other contractors employed by the State may be considered Justified Delays insofar as they interfere with the Contractor's Completion of the Work within the Contract Time. Delays due to normal weather conditions which prevent the Contractor from proceeding with the controlling item on the Official Progress Schedule will not be regarded as a Justified Delay.

- .1 Justified Delay will result in an extension beyond the Contract Time in accordance with Paragraph 7.4.
- .2 Justified Delay that includes Contract modifications ordered by the State may entitle the Contractor to extra compensation in accordance with the provisions of Article 6.
- .3 Delay that results from causes beyond the control of the State and is determined by the State to be the Contractor's responsibility shall be considered Unjustified and will result in no extension in the Contract Time or extra compensation. The State's decision shall be final and conclusive.
- .4 The State will determine the net difference between overlapping or concurrent Justified Delays and Unjustified Delays and whether the Contractor is entitled to any extension in the Contract Time and/or extra compensation. The State's decision shall be final and conclusive.

7.5.3 Weather Delays: If weather conditions are the basis for delays in the continuance or completion of the Work, such delay shall be documented by 5 year climatological data obtained by the Contractor, from the nearest nationally recognized reporting station to the Work site, substantiating that weather conditions were abnormal for the period of time and could not have been reasonably anticipated, and that weather conditions had an adverse effect on the scheduled construction. The State will not be responsible for additional costs of the Contractor caused by weather delays, including, but not limited to, costs of extended overhead.

7.6 ACCELERATION

7.6.1 The State reserves the right to accelerate the Work of the Contract. In the event that the State directs acceleration, such directive will be only in written form. The Contractor shall keep cost and other Project records related to the acceleration directive separately from normal Project costs and records, and shall provide a written record of acceleration cost to the State on a daily basis.

7.6.2 In the event that the Contractor believes that some action or inaction on the part of the State constitutes an acceleration directive, the Contractor shall immediately notify the State in writing that the Contractor considers the actions an acceleration directive. This written notification shall detail the circumstances of the acceleration directive. The Contractor shall not accelerate work efforts until the State responds to the written notification. If acceleration is then directed or required by the State, cost records referred to above shall be maintained by the Contractor and provided to the State on a daily basis.

7.6.3 In order to recover additional costs due to acceleration, the Contractor shall document that additional expenses were incurred and paid by the Contractor. Labor costs recoverable will be only overtime or shift premium costs or the cost of additional laborers brought to the site to accomplish the accelerated work effort. Equipment costs recoverable will be only the cost of added equipment mobilized to the site to accomplish the accelerated work effort.

ARTICLE 8 - PAYMENTS AND COMPLETION

8.1 SCHEDULE OF VALUES: Before the first payment request, the Contractor shall submit to the State a Schedule of Values allocated to portions of the Work, included with the Contractor's Progress Schedule, and supported by such data to substantiate the accuracy as the State may require. This Schedule of Values, unless objected to by the State, shall be used as a basis for progress payments.

8.2 TIMELINESS OF PAYMENTS

8.2.1 Upon receipt of a payment request by the designated State's Representative with updated Progress Schedule from the Contractor, the State will review same to determine if it is a proper payment request based on the approved Schedule of Values. Any payment request determined by the State not to be suitable for payment shall be modified and processed in accordance with the State's assessment or returned to the Contractor for resubmittal. The reason(s) the payment request was deemed unsuitable shall be stated in writing.

8.2.2 Actual payment request submittal date shall be established by the State. Thereafter, the payment request submittal date will be monthly on the same date.

8.2.3 The State will make progress payments pursuant to Public Contract Code, Section 10261.5.

8.3 RETENTIONS

8.3.1 Upon submittal and receipt of a monthly payment request in accordance with Paragraph 8.2 above, the following shall apply:

- .1 The Contractor's payment request shall include the total amount of Work completed to date, including materials as verified by the State, furnished and delivered on the Project site, not used, or in a secure off-site facility, pursuant to Public Contract Code, Section 10261. All materials included in the Contractor's payment requests furnished and delivered on the Project site, not used, and /or in a secure off-site facility shall be used exclusively for the Project. It shall be the sole responsibility of the Contractor to maintain, protect and secure such materials.
- .2 The State shall retain not less than 5 percent of the estimated value of Work completed.

8.3.2 Securities in Lieu of Retention: At the request and expense of the Contractor, and in accordance with Public Contract Code, Section 10263, the Contractor may provide securities in lieu of retention.

8.4 **ASSIGNMENT OF CONTRACT FUNDS:** The Contractor may assign moneys due or to become due under the Contract, through an amendment to the Contract. Any assignment of moneys earned by the Contractor shall be subject to proper retention in favor of the State and to deductions provided for in the Contract. Moneys withheld, whether assigned or not, are subject to being used by the State to the extent permitted by law, for the Completion of the Work in the event that the Contractor is in default of the Contract.

8.5 OCCUPANCY BY THE STATE PRIOR TO COMPLETION OF THE WORK

8.5.1 The State reserves the right to occupy all or any part of the Project prior to Completion of the Work, upon written notice. Such occupancy or use is herein referred to as Beneficial Occupancy. In this event, the Contractor shall be relieved of responsibility to the State for liability arising out of such occupancy by the State. Nevertheless, the Builder's Risk Coverage must remain in effect, with either a "consent to occupy" endorsement or a waiver of occupancy endorsement, with no right of recovery against the State.

8.5.2 The State's Beneficial Occupancy does not constitute Completion of the Work or Acceptance of the Work by the State, or any portion of the Work, nor will it relieve the Contractor of responsibility for correcting defective Work or materials found at any time before Acceptance of the Work, as set forth in Article 12 or during the Guarantee period as set forth in Paragraph 3.5, or after the State's acceptance, as set forth in Subparagraph 8.6.1. However, when the Project includes separate buildings, and one or more of the buildings is entirely occupied by the State, then upon written request by the Contractor and by written consent from the State, the Guarantee period will commence to run from the date of the State's occupancy of such building or buildings.

8.6 ACCEPTANCE OF THE WORK AND FINAL PAYMENT

8.6.1 When the Contractor considers the Work complete, the Contractor shall request a final inspection in writing to be conducted by the State.

- .1 The Contractor shall request this final inspection only when all Work, including deficient items identified on previous inspections, have been completed and deliverables delivered as noted in the Project Manual, Section 01 77 00.
- .2 The State Representative shall conduct a final inspection within 14 days of receipt of a written request from the Contractor for final inspection.
- .3 If, after the inspection, the State Representative determines that the Work is complete, the State Representative will establish a date for Completion of the Work. The State Representative will then recommend to the Director of the Department of General Services, or the Director's designee, to accept the Work within 60 days from the

date of Completion of the Work.

- .4 Upon Acceptance of the Work by the Director:
 - a) The Retention held by the State will be released, and
 - b) The Contractor will be relieved of the duty of maintaining and protecting the Work.
- .5 If the State determines that the Work is not complete, the Contractor will be notified in writing of deficiencies. After correcting all deficiencies the Contractor shall again initiate the procedures for final inspection as set forth above. If the process of re-inspection and correction of deficiencies goes beyond the Contract Time, the Contractor shall be assessed liquidated damages.
- .6 Determination by the State that the Work is complete or Acceptance of the Work will not bar any Claim against the Contractor pursuant to Paragraph 3.5.

8.6.2 Upon Acceptance of the Work, the State will submit a final statement to the Contractor:

- .1 The final statement shall take into account the Contract Sum as adjusted by any Change Orders, amounts already paid to the Contractor, sums to be withheld for incomplete Work, liquidated damages, stop notices, and for any other cause under the Contract.
- .2 A warrant in the amount of the sum due the Contractor, if any, will be issued.
- .3 If the Contractor owes any amount to the State, the final statement shall serve as an invoice to the Contractor.

8.6.3 The Contractor is required to pay Subcontractors from which a Retention has been withheld within 7 days of receipt from the State of Retention proceeds.

8.6.4 The Contractor has 30 days after receipt of the final statement to file a Claim with the State.

- .1 All Claims shall comply with the requirements of Subparagraph 9.1.2.
- .2 Failure to file a Claim within the 30 day period constitutes a failure to diligently pursue and exhaust the required administrative procedures set forth in the Contract. Such failure shall constitute waiver of additional rights to compensation under the Contract or the right to request Equitable Adjustment.
- .3 If the Contractor does not file a Claim within the 30 day period, the final warrant made by the State will become a complete and final settlement between the State and the Contractor.

8.7 **INTEREST:** Payments due and unpaid under the Contract shall earn interest pursuant to Public Contract Code, Sections 7107 and 10261.5.

ARTICLE 9 - DISPUTES AND CLAIMS

9.1 DISPUTE AND CLAIM PROCEDURES

9.1.1 Dispute as to Contract Requirements: When the Contractor and the State fail to agree whether or not any work is within the scope of Contract requirements, the Contractor shall immediately perform such work upon receipt of a written notice to do so by the State. Within 14 days after receipt of such notice to perform disputed work, the Contractor may submit a written protest to the State, specifying in detail the Contract requirements that were exceeded, and approximate change in cost resulting so that the State will have notice of a potential Claim. Failure to submit a protest within the specified period shall constitute a waiver of any and all rights to an adjustment in Contract Sum and Contract Time due to such work, and the Contractor thereafter shall not be entitled to adjustment of Contract Sum or Contract Time. For any such work that is found to exceed Contract requirements, there shall be an adjustment in Contract Sum and Contract Time on same basis as any other change in the Work.

- .1 The Contractor shall provide supporting data and shall provide and maintain records of costs attributable to Disputes in similar manner as for Change Orders in Article 6.
- .2 The State's Representative and the Contractor's Superintendent will make every reasonable effort to resolve the Dispute prior to proceeding to the next step.
- .3 Either the State or the Contractor may call a special meeting for the purpose of resolving the Dispute. Such a meeting will be held within 7 days of written request thereof.
- .4 If the Dispute as to the Contract Documents has not been resolved, the Contractor shall, within 14 days after the special meeting, take one or more of the following actions:
 - .1 submit additional supporting data requested by the State;
 - .2 modify the initial Dispute; or
 - .3 notify the State that the initial Dispute stands as is.
- .5 If the Dispute has not been resolved within 7 days after the Contractor's action in response to Clause 9.1.1.4, another meeting may be scheduled, at the State's option, with senior management personnel of the State and the Contractor. The purpose of this meeting is to resolve the Dispute prior to proceeding to the action under

Subparagraph 9.1.2.

9.1.2 Claim Submission and Documentation: If a Dispute has not been resolved at the time of the State's final statement, the Contractor shall submit within 30 days a Claim along with detailed documentation required by Subparagraph 9.1.1 for the State's consideration.

- .1 The Contractor shall furnish 3 certified copies of the required Claim documentation. The Claim documentation shall be complete when furnished. The evaluation of the Contractor's Claim will be based upon State records and the Claim documents furnished by the Contractor.
- .2 Claim documentation shall conform to generally accepted accounting principles and shall be in the following format:
 - .1 General Introduction
 - .2 General Background Discussion
 - .3 Issues
 - .1 Index of Issues (listed numerically)
 - .2 For each issue
 - .1 Background
 - .2 Chronology
 - .3 Contractor's position (reason for State's potential liability)
 - .4 Supporting documentation of merit or entitlement
 - .5 Supporting documentation of damages
 - .6 Begin each issue on a new page
 - .4 All critical path method (CPM) schedules, both as-planned, monthly updates, schedule revisions, and as-built along with the computer disks of all schedules related to the Claim.
 - .5 Productivity exhibits (if appropriate)
 - .6 Summary of Issues and Damages
- .3 Supporting documentation of merit for each issue shall be cited by reference, photocopies, or explanation. Supporting documentation may include, but shall not be limited to, General Conditions; General Requirements; technical Specifications; Drawings; correspondence; conference notes; Shop Drawings and submittals; Shop Drawing logs; survey books; inspection reports; delivery schedules; test reports; daily reports; subcontracts; fragmentary critical path method (CPM) schedules or time impact analyses; photographs; technical reports; requests for information; field instructions; and all other related records necessary to support the Contractor's Claim.
- .4 Supporting documentation of damages for each issue shall be cited, photocopied, or explained. Supporting documentation may include, but shall not be limited to, documents related to the preparation and submission of the bid; certified, detailed labor records, including labor distribution reports; material and equipment procurement records; construction equipment ownership costs records or rental records; Subcontractor or vendor files and cost records; service cost records; purchase orders; invoices; Project as-planned and as-built cost records; general ledger records; variance reports; accounting adjustment records; and any other accounting materials necessary to support the Contractor's Claim.
- .5 Each copy of the Claim documentation shall be certified by a responsible officer of the Contractor in accordance with the requirements of the Contract Documents.
- .6 Should the Contractor be unable to support any part of the Claim, and it is determined that such inability is attributable to falsity of such certification or misrepresentation of fact or fraud on the part of the Contractor, the Contractor shall be liable to the State as provided for under California Government Code, Section 12650 et seq., known as the False Claims Act.
- .7 The State will render a written decision to the Contractor relative to the Claim. The State's written decision shall be final and binding on the party(ies) but subject to arbitration. The State may withhold from the final payment an amount not to exceed 150 percent of the disputed amount. If there is a Surety and there appears to be a possibility of a Contractor's default, the State may, but is not obligated to, notify the Surety and request the Surety's assistance in resolving the controversy.
- .8 All issue items to be included in the Complaint in Arbitration shall be a part of the Claim submitted with the required documentation under this Subparagraph 9.1.2. Issues not included in the Claim under Subparagraph 9.1.2 shall not be considered.

9.1.3 Arbitration: Any Claim filed in compliance with Subparagraph 9.1.2 not resolved by the above procedures shall be resolved by arbitration in accordance with the provisions of Public Contract Code Section 10240 et seq., and Title 1, California Code of Regulations, Section 1300 et seq., unless the State and the Contractor agree in writing to waive arbitration and proceed to litigation. Either party may initiate arbitration by filing a Complaint in Arbitration with the Office of Administrative Hearings in

Sacramento, California, in compliance with the requirements of Public Contract Code Section 10240, et seq., and Title 1, California Code of Regulations, Section 1300 et seq. Arbitration shall be conducted in Sacramento, California.

9.2 AUDIT AND ACCESS TO RECORDS

9.2.1 The Contractor shall maintain books, records, documents, and other evidence directly pertinent to the performance of the Work under this Contract, in accordance with generally accepted accounting principles and practices consistently applied. The Contractor shall also maintain all financial information and data used by the Contractor in the preparation or support of any cost submission, including the Contractor's original bid required for this Contract, or any Change Order, Claim, or other request for equitable adjustment, and a copy of the cost summary or information submitted to the State. The State's Representative shall have access upon 24 hours advance written notice, at all times during normal business hours, to such books, records, documents, financial information, and all other evidence for the purpose of inspection, audit, and copying. The Contractor shall, at no cost to the State, provide proper facilities for such access, inspection and copying purposes.

9.2.2 The Contractor agrees to make the provisions of Paragraph 9.2 applicable to this Contract, and Change Orders, Claims, or other requests for Equitable Adjustment affecting the Contract Time or Contract Sum. The Contractor agrees to include the provisions of Paragraph 9.2 in subcontracts and sub-subcontracts or purchase orders, at any tier, and make Paragraph 9.2 applicable to subcontracts, at any tier, in excess of \$10,000, and to make the provisions of Paragraph 9.2 applicable to Change Orders, Claims, and other requests for Equitable Adjustment related to Project performance.

9.2.3 Audits conducted under Paragraph 9.2 shall be in accordance with general accepted auditing standards and established procedures and guidelines of the reviewing or audit agency.

9.2.4 The Contractor agrees to the disclosure of all information and reports resulting from access to records under the provisions of Paragraph 9.2, to the State, and other affected agencies.

9.2.5 Records under the provisions of Paragraph 9.2 shall be maintained and made available during the performance of the Work under this Contract until 3 years past final payment, and until final settlement of all Disputes, Claims, or litigation, whichever occurs later. In addition, those records which relate to any portion of this Contract, to any Change Order, to any Dispute, to any litigation, to the settlement of any Claim arising out of such performance, or to the cost or items to which an audit exception has been taken, shall be maintained and made available until final payment or final resolution of such Dispute, litigation, Claim, or exception, whichever occurs later.

9.2.6 The right of access provisions of Paragraph 9.2 applies to financial records pertaining to this Contract and Change Orders and Claims. In addition, this right of access applies to records pertaining to all contracts, Change Orders, and Contract Amendments:

- .1 To the extent the records pertain directly to Contract performance;
- .2 If there is any indication that fraud, gross abuse, or corrupt practices may be involved;
- .3 If the Contract is terminated for default or convenience.

9.2.7 Access to records is not limited to the required retention periods. The authorized State Representatives shall have access to records at any reasonable time for as long as the records are maintained.

9.2.8 Further, the Contractor agrees to include a similar right of the State to audit records and interview staff in any subcontract related to performance of this Agreement, in regards to the Disabled Veterans Business Enterprise (DVBE) Program.

ARTICLE 10 - PROTECTION OF PERSONS AND PROPERTY

10.1 SAFETY OF PERSONS AND PROPERTY

10.1.1 The Contractor shall initiate, maintain and supervise -safety precautions and programs in connection with the performance of the Work.

10.1.2 The Contractor shall take precautions for safety and provide protection to prevent damage, injury or loss to:

- .1 Employees working under the Contract and other persons who may be affected thereby;
- .2 The Work and materials and equipment to be incorporated therein, whether in storage on or off the Project site, under care, custody or control of the Contractor or the Contractor's Subcontractors or Sub-subcontractors; and
- .3 Other property at the Project site, or adjacent thereto, such as trees, shrubs, lawns, walks, pavements, roadways, structures and utilities, except as otherwise noted or specified.

10.1.3 The Contractor shall 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.

10.1.4 The Contractor shall erect and maintain, as required by existing conditions and performance of the Contract, safeguards for safety and protection, including posting danger signs and other warnings against hazards, promulgating safety regulations and notifying the State, other Owners (other than the State) and users of adjacent sites and utilities.

10.1.5 The Contractor shall comply with applicable laws, ordinances, rules, regulations and lawful orders of public authorities regarding the storage and/or use of explosives or other hazardous materials or equipment necessary for execution of Work. The Contractor shall employ properly qualified personnel for supervision of same.

10.1.6 The Contractor shall remedy damage and loss to property referred to in Clauses 10.1.2.2 and 10.1.2.3 caused in whole or in part by the Contractor, a Subcontractor, a Sub-subcontractor, or anyone directly or indirectly employed by any of them, or by anyone for whose acts they may be liable and for which the Contractor is responsible under Clauses 10.1.2.2 and 10.1.2.3. The foregoing obligations of the Contractor are in addition to the Contractor's obligations under Paragraph 3.19.

10.1.7 The Contractor shall not permit any part of the Work or Project site to be loaded so as to endanger its safety.

10.1.8 When conditions of the Work, in the judgment of the State, present risk of injury or death to persons or property damage, the State, may direct the Contractor, at the Contractor's sole expense, to close down the Work and not commence work again until dangerous conditions are eliminated.

10.1.9 The Contractor, at the Contractor's own cost, shall rebuild, repair, restore and make good damages to any portion of the Work affected by such causes before Acceptance of the Work.

10.2 **EMERGENCIES:** In an emergency affecting safety of persons or property, the Contractor shall act, at the Contractor's sole discretion, to prevent any threatened damage, injury or loss. Additional compensation or extension of Contract Time claimed by the Contractor because of an emergency will be reviewed as provided in Article 6.

10.3 **DRUG-FREE WORKPLACE**

10.3.1 By signing the Agreement, the Contractor certifies, under penalty of perjury under the laws of the State of California, that the Contractor will comply with the requirements of the Drug-Free Workplace Act of 1990 (Government Code, Section 8350 et seq.), and will provide a drug-free workplace by taking the following actions:

- .1 Publish a statement notifying employees that unlawful manufacture, distribution, dispensation, possession, or use of a controlled substance is prohibited and specifying actions to be taken against employees for violations.
- .2 Establish a Drug-Free Awareness Program to inform employees about:
 - .1 The dangers of drug abuse in the workplace;
 - .2 The person's or company's policy of maintaining a drug-free workplace;
 - .3 Any available counseling, rehabilitation, and employee assistance programs; and,
 - .4 penalties that may be imposed upon employees for drug abuse violations.
- .3 Provide, as required by Government Code, Section 8355(c), that every employee who works under the Contract will:
 - .1 receive a copy of the company's drug-free workplace policy statement; and
 - .2 agree to abide by the terms of the company's statement as a condition of employment.

ARTICLE 11 - INSURANCE AND BONDS

11.1 CONTRACTOR'S INSURANCE

11.1.1 General Insurance Requirements:

- .1 Contractor shall procure and maintain insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work hereunder and the results of that work by the Contractor, its agents, representatives, employees or subcontractors.
 - .1 Contractor shall furnish the State with original certificates and endorsements effecting coverage required by this clause. All certificates and endorsements are to be received and approved by the State before work commences.
 - .2 The State reserves the right to require complete, certified copies of all required insurance policies, including endorsements affecting the coverage required by these specifications at any time.
- .2 Insurance Companies shall be acceptable to Department of General Services (DGS) and Office of Risk and Insurance Management (ORIM). Insurance is to be placed with insurers with a current A.M. Best's rating of no less than A-VI. Exception may be made for the State Compensation Insurance Fund. If self-insured, review of financial information may be required.
- .3 Except as otherwise provided for Builders Risk/Installation Floater under Clause 11.1.2.4, all coverage shall be in force until the Acceptance of the Work by the Director of DGS. If the insurance expires, the Contractor shall immediately provide a new current certificate or be declared in breach of Contract. The State reserves the right to withhold all progress and retention payments until the breach is cured to the satisfaction of the State. Renewal insurance certificates must be tendered to the State prior to or exactly at the expiration of the previous insurance certificate. There shall be no gap in insurance coverage. This renewed insurance shall be in accordance with the terms of the Contract.
- .4 Insurance policies shall contain a provision that coverage will not be cancelled without 30 days prior written notice to the State.
- .5 The Contractor shall be responsible for any deductible or self-insured retention contained within the insurance.
- .6 In the event the Contractor fails to keep in effect at all times the specified insurance coverage, the State may, in addition to the remedies noted in Article 11.1.1.3 above and any other remedies it may have, remove the Contractor from the work site and/or may terminate this Contract upon the occurrence of such event, subject to the provisions of this Contract. In the event, the State elects to remove the Contractor from the work site, the Contractor will not be entitled to additional days or compensation.
- .7 Any insurance required to be carried shall be primary.
- .8 Minimum Scope of Insurance - Coverage shall be at least as broad as:
 - .1 Insurance Services Office Commercial General Liability coverage (occurrence Form CG 0001). The insurance Certificate shall show the GL form number.
 - .2 Insurance Services Office Form Number CA 0001 covering Automobile Liability, "any auto", or "scheduled, hired and nonowned".
- .9 The State reserves the right to require the Contractor to provide the subcontractors' insurance certificates and policies, when so directed by the State.

11.1.2 Insurance Requirements: The Contractor shall furnish to the State evidence of the required insurance as follows:

- .1 Commercial General Liability: The Contractor shall maintain commercial general liability with limits of not less than \$5,000,000 per occurrence for bodily injury and property damage liability combined. If Commercial General Liability insurance or other form with a general aggregate limit is used, either the general aggregate limit shall apply separately to this project/location or the general aggregate limit shall be twice the required occurrence limit. If the aggregate applies "per project or location", it shall so state on the certificate. The policy shall include coverage for liabilities arising out of premises, operations, independent contractors, products, completed operations, personal and advertising injury, and liability assumed under an insured contract. This insurance shall apply separately to each insured against whom claim is made or suit is brought subject to the Contractor's limit of liability. The policy shall include the Department of General Services and the State of California, its officers, agents, and employees, as additional insureds, but only insofar as the operations under the Contract are concerned.
 - .1 Additional Insured coverage shall be provided in the form of an insured endorsement (CG 20 10 11 85 r equivalent) to the contractor's insurance policy. The endorsement must be attached to the certificate.

- .2 Deductibles and Self-Insured Retentions (for Commercial General Liability): Any deductibles or self-insured retentions must be declared to and approved by the State. At the option of the State, either: the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects the State of California and the Department of General Services, its officers, agents, employees and servants or the Contractor shall provide a financial guarantee satisfactory to the State guaranteeing payment of losses and related investigations, claim administration, and defense expenses.
- .2 Automobile Liability: The Contractor shall maintain motor vehicle liability with limits of not less than \$1,000,000 per accident for bodily injury and property damage. The State is to be covered as additional insured with respect to liability arising out of automobiles owned, leased, hired or borrowed by or on behalf of the contractor.
- .3 Workers' Compensation: The Contractor shall maintain statutory workers' compensation and employer's liability coverage for all its employees who will be engaged in the performance of the Contract, including special coverage extensions where applicable as required by the State of California. The Workers' Compensation policy shall be endorsed with a waiver of subrogation in favor of the State for all work performed by the contractor, its employees, agents and subcontractors. Except for State Fund, all subrogation waiver endorsements shall be on a separate form attached to the certificate. The Contractor shall maintain Employer's Liability coverage of \$1,000,000 per accident for bodily injury or disease.
- .4 Builders Risk/Installation Floater: The Contractor shall maintain in force, at its own expense, Builders Risk/Installation Floater covering the Contractor's labor, materials, and equipment to be used for completion of the Work performed under this Contract against all risks of direct physical loss, excluding earthquake and flood, for an amount equal to the full amount of the Contract Sum.
 - .1 The Contractor agrees as a provision of the contract to waive all rights of recovery against the State.
 - .2 The State of California, Department of General Services shall be a named insured or additional insured under the policy.
 - .3 The policy shall have a loss payable clause in favor of the State of California, Department of General Services.
 - .4 The requirement for maintaining the Builders Risk/Installation Floater shall be in full force at all times during the entire duration of the Contract Time without any gaps, delays or breaks in coverage. This includes Beneficial Occupancy and authorized adjustment for time extensions. Coverage shall be maintained until Completion of the Work, except for delivery of as-built drawings, operation and maintenance manuals, guarantees, warranties, spare parts, reports and certifications as noted in the Closeout Procedures section of the Project Manual and as determined by the State's Representative in writing.

11.1.3 Neither the State, nor any officer or employee of the State, shall be liable for any loss or damage that may happen to the Work, or any part thereof; nor to any of the materials or other items used or employed in performing the Work; nor for injury to any person or persons, either workers or the public, for damage to property from any cause which might have been prevented by the Contractor, or the Contractor's employees or agents, against all of which injuries or damages the Contractor shall properly guard. The Contractor shall indemnify and hold harmless the State, and all officers and employees of the State, from all suits, actions or claims brought for, or on account of injuries or damages received or sustained by any person or persons, by or from the Contractor, the Contractor's employees or agents, in construction of the Work, or by or in consequence of the Contractor's failure to properly guard the same, or by or as a result of any act or omission of the Contractor, the Contractor's employees or agents. In addition to any remedy authorized by law, moneys due the Contractor under the Contract, as considered necessary by the State, may be retained until disposition has been made of such suits, actions, or claims for damages; however, this provision shall not be construed as precluding the State from enforcing any right of offset the State may have to any such moneys.

11.2 **NO PERSONAL LIABILITY:** Neither the State, nor any other officer or employee of the State will be personally responsible for liabilities arising under the Contract.

11.3 **PERFORMANCE BOND AND PAYMENT BOND**

11.3.1 The Contractor shall furnish bonds, each in the amount of 100 percent of the Contract Sum, covering faithful performance of the Contract and payment of obligations arising thereunder, as stipulated in the bidding requirements or as specifically required in the Contract Documents.

11.3.2 Upon the request of any person or entity appearing to be a potential beneficiary of bonds covering payment of obligations arising under the Contract, the Contractor shall promptly furnish a copy of the bond(s) or permit a copy to be made.

ARTICLE 12 - UNCOVERING AND CORRECTION OF WORK

12.1 UNCOVERING AND CORRECTION OF WORK

12.1.1 If a portion of the Work is covered prior to the State's review, it shall, if requested in writing by the State, be uncovered for the State's observation and replaced at the Contractor's expense without change in the Contract Time.

12.1.2 The Contractor shall notify the State 2 working days prior to covering any work.

12.2 CORRECTION OF WORK

12.2.1 The Contractor shall promptly correct work rejected by the State or Work failing to conform to the requirements of the Contract Documents, whether or not fabricated, installed or completed. The Contractor shall bear the costs of correcting such rejected work, including additional testing and inspections required and compensation for the State's services and expenses made necessary thereby.

12.2.2 Notwithstanding Paragraph 3.5, in the event of an emergency constituting an immediate hazard to the health or safety of any persons or property, the State may undertake, at the Contractor's expense and without prior notice, work necessary to correct such hazardous condition(s) arising from work performed by the Contractor that is not in conformance with the requirements of the Contract Documents.

12.2.3 The Contractor shall remove from the Project site portions of the Work that are not in accordance with the requirements of the Contract Documents, and are neither corrected by the Contractor nor accepted by the State.

12.2.4 If the Contractor fails to correct nonconforming work, as per Paragraph 3.5, the State may correct the nonconforming work in accordance with Paragraph 2.3. If the Contractor does not proceed with correction of such nonconforming work, within such time fixed by written notice from the State, the State may remove and store the salvable materials articles and/or equipment at the Contractor's expense. If the Contractor does not pay all costs of such removal and storage within 14 days after written notice, the State may, upon 14 additional calendar days written notice, sell such materials articles and/or equipment at an auction or private sale, and shall account for the proceeds thereof, after deducting costs and damages that would have been borne by the Contractor, including compensation for the State's services and expenses made necessary thereby. If the proceeds of a sale do not cover all costs that the Contractor would have borne, the Contract Sum shall be reduced by the deficiency. If payments then or thereafter due the Contractor are not sufficient to cover such amount, the Contractor shall pay the difference to the State.

12.2.5 The Contractor shall bear the cost of correcting destroyed or damaged Work executed by the State or separate contractors, whether fully completed or partially completed, which is caused by the Contractor's correction or removal of Work that is not in accordance with requirements of the Contract Documents.

12.2.6 Nothing contained in this Paragraph 12.2 shall be construed to establish a period of limitation with respect to other obligations that the Contractor might have in the Contract Documents. Establishment of the time period of 1 year, as described in Subparagraph 3.5.1, relates only to the specific obligation of the Contractor to correct the Work, and has no relationship to the time within which the obligation to comply with requirements of the Contract Documents may be sought to be enforced, nor to the time within which proceedings may be commenced to establish the Contractor's liability with respect to the Contractor's obligations other than specifically to correct the Work.

12.3 **ACCEPTANCE OF NONCONFORMING WORK:** If the State prefers to accept any or all of the Work that is not in accordance with requirements of the Contract Documents, the State may do so instead of requiring its correction and/or removal, in which case the Contract Sum will be reduced as appropriate and equitable. Such adjustment shall be effected whether or not final payment to the Contractor has been made.

ARTICLE 13 - MISCELLANEOUS PROVISIONS

13.1 **GOVERNING LAW:** The Contract shall be governed by the law of the State of California.

13.2 **SUCCESSORS AND ASSIGNS:** The Contract binds the Contractor, the Contractor's partners, successors, assigns and legal representatives to the State 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 in the Contract Documents.

13.3 **WRITTEN NOTICE:** Written notice shall be deemed to have been duly served if delivered in person to the individual; or a member of the firm or entity; or to an officer of the corporation for which it was intended; or if delivered to or sent by US mail to the last business address known to the party giving notice.

13.4 **CONTRACTOR'S USE OF COMPUTER SOFTWARE:** The Contractor, by signing the Agreement, certifies that it has appropriate systems and controls in place to ensure that State funds will not be used in the performance of the Contract for the acquisition, operation or maintenance of computer software in violation of copyright laws.

13.5 **INDEPENDENT CONTRACTOR:** Contractor, and the agents, subcontractors, and employees of the Contractor, in the performance of this Contract, shall act in an independent capacity and not as officers or employees or agents of the State.

13.6 **UNENFORCEABLE PROVISIONS:** In the event that any provision of this Contract is unenforceable or held to be unenforceable, then the parties agree that all other provisions of this Contract have force and effect and shall not be affected thereby.

13.7 **EXPATRIATE CORPORATIONS:** Contractor hereby declares that it is not an expatriate corporation or subsidiary of an expatriate corporation within the meaning of Public Contract Code Section 10286 and 10286.1, and is eligible to contract with the State.

13.8 **DOMESTIC PARTNERS:** For Contracts executed or amended after July 1, 2004, the Contractor may elect to offer domestic partner benefits to the Contractor's employees in accordance with Public Contract Code Section 10295.3. However, the Contractor cannot require an employee to cover the costs of providing any benefits which have otherwise been provided to all employees regardless of marital or domestic partner status.

13.9 **AIR OR WATER POLLUTION VIOLATION:** Under the State laws, the Contractor shall not be: (1) in violation of any order or resolution not subject to review promulgated by the State Air Resources Board or an air pollution control district; (2) subject to cease and desist order not subject to review issued pursuant to Section 13301 of the Water Code for violation of waste discharge requirements or discharge prohibitions; or (3) finally determined to be in violation of provisions of federal law relating to air or water pollution.

13.10 **CERTIFICATION BY CONTRACTOR OF DISABLED VETERAN BUSINESS ENTERPRISE/SMALL BUSINESS PARTICIPATION**

13.10.1 If, for this agreement, the Contractor made a commitment to achieve disabled veteran business enterprise (DVBE) participation, the Contractor must certify in writing to the State, the total amount the Contractor received under the contract, the name and address of the DVBE firms that participated in the performance of the contract, the amount each DVBE received from the Contractor, that all payments have been made to the DVBE and the actual percentage of DVBE participation achieved. Additionally, if for this agreement, the Contractor made a commitment to achieve 25% Small Business participation, the Contractor must certify in writing to the State, the actual percentage of Small Business participation that was achieved. The Contractor is instructed to comply with the procedures stated in CLOSEOUT PROCEDURES, Section 01 77 00. This certification shall be completed pursuant to Section 999.5 of the Military and Veterans Code (M&VC) and Section 14841 of the Government Code. A person or entity that knowingly provides false information shall be subject to a civil penalty for each violation.

END OF DOCUMENT

DOCUMENT 00 73 00
SUPPLEMENTARY CONDITIONS

Requirements included herein supplement DOCUMENT 00 72 00 - GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION.

1. ARTICLE 1 – GENERAL PROVISIONS

Paragraph 1.1, DEFINITIONS

Add the following definition:

Construction Manager: A consultant firm, Vanir, retained for this Project by the State to assist the Department of General Services.

Hazardous Materials: These materials include but are not limited to products and materials containing: Asbestos, Lead, PCB's, Petroleum fuels and lubricants (including chemical additives), oxidizers, corrosives, solvents, acids and carcinogens.

2. ARTICLE 2 – ADMINISTRATION OF THE CONTRACT

Paragraph 2.6, RUSSIAN SANCTION ORDERS

Add the following Subparagraph 2.6

2.6 On March 4, 2022, Governor Gavin Newsom issued Executive Order (EO) N-6-22 regarding Economic Sanctions against Russia and Russian entities and individuals. "Economic Sanctions" refers to sanctions imposed by the U.S. government in response to Russia's actions in Ukraine, as well as any sanctions imposed under state law. The EO directs state agencies to terminate contracts with, and to refrain from entering any new contracts with, individuals or entities that are determined to be a target of Economic Sanctions. Accordingly, should the State determine Contractor is a target of Economic Sanctions or is conducting prohibited transactions with sanctioned individuals or entities, that shall be grounds for termination of this agreement. The State shall provide Contractor advance written notice of such termination, allowing Contractor at least 30 calendar days to provide a written response. Termination shall be at the sole discretion of the State.

Paragraph 2.7. GENERATIVE ARTIFICIAL INTELLIGENCE (GenAI) REPORTING

Add the following Subparagraph 2.7

2.7.1 Definitions: The following terms are in addition to the defined terms and shall apply to the Contract:

.1 "Generative AI (GenAI)" means an artificial intelligence system that can generate derived synthetic content, including text, images, video, and audio that emulates the structure and characteristics of the system's training data. (Gov. Code § 11549.64.)

2.7.2 Contractor shall immediately notify the State in writing if it: (1) intends to provide GenAI as a deliverable to the State; or (2), intends to utilize GenAI, including GenAI from third parties, to complete all or a portion of any deliverable that materially impacts: (i) functionality of a State system, (ii) risk to the State, or (iii) Contract performance. For avoidance of doubt, the term "materially impacts" shall have the meaning set forth in State Administrative Manual (SAM) § 4986.2 Definitions for GenAI.

2.7.3 Notification shall be provided to the State's Representative identified in this Contract.

SUPPLEMENTARY CONDITIONS

2.7.4 At the direction of the State, Contractor shall discontinue the provision to the State of any previously unreported GenAI that results in a material impact to the functionality of the System, risk to the State, or Contract performance, as determined by the State.

2.7.5 If the use of previously undisclosed GenAI is approved by the State, then Contractor will update the Deliverable description, and the Parties will amend the Contract accordingly, which may include incorporating the GenAI Special Provisions into the Contract, at no additional cost to the State.

2.7.6 The State, at its sole discretion, may consider Contractor's failure to disclose or discontinue the provision or use of GenAI as described above, to constitute a material breach of Contract when such failure results in a material impact to the functionality of the System, risk to the State, or Contract performance. The State is entitled to seek any and all remedies available to it under law as a result of such breach, including but not limited to termination of the contract.

Paragraph 2.8, NEWS RELEASES

Add the following Subparagraph 2.8

2.8 News releases pertaining to award of, or work performed as a result of, contract may not be made without prior written approval from:

The Public Information Officer
707 Third Street, MS 101
West Sacramento, CA 95605
Phone: (916) 376-5037
Email: DGSPublicAffairs@dgs.ca.gov _

3. ARTICLE 3 – CONTRACTOR

Paragraph 3.2, SUPERVISION AND CONSTRUCTION PROCEDURES

Delete Subparagraph 3.2.5 in its entirety and replace it with new Subparagraph 3.2.5 as follows:

3.2.5 Until Acceptance of the Work, the Contractor shall have the charge and care thereof, and shall bear risk of injury or damage to any part of the Work by action on the elements (except for an Act of God, or natural disaster as proclaimed by the State or Federal Government provided that the loss does not involve Contractor negligence and if the Work damaged is built in accordance with the Contract and applicable building standards), or from any other reason except for such damages as are directly caused by acts of the Federal or State Government and the public enemy, except as provided in Paragraph 8.5.

Paragraph 3.3, LABOR AND MATERIALS

Delete Subparagraph 3.3.3 in its entirety and replace it with new Subparagraph 3.3.3 as follows:

3.3.3. Prevailing Wage: The Contractor shall comply with Labor Code Sections 1774 and 1775. Pursuant to Section 1774, the Contractor and every subcontractor, regardless of tier, shall pay not less than the specified prevailing wage rates to all workers employed in the execution of the Contract. In accordance with Section 1775, the Contractor shall forfeit to the State up to \$200 for each day, or portion thereof, for each worker paid less than the prevailing wage rates for the work or craft in which the worker is employed for any work executed under the Contract by the Contractor or by any

subcontractor, regardless of tier, in violation of the provisions of the Labor Code; and, in particular, Labor Code Sections 1770 to 1780, inclusive. In addition to such forfeiture, the difference between such stipulated prevailing wage rates and the amount paid to each worker for each day, or portion thereof, shall be paid to each underpaid worker by the Contractor. This provision shall not apply to properly registered apprentices.

- .1 Pursuant to Labor Code, Section 1770, the Director of the Department of Industrial Relations has ascertained the general prevailing rate of per diem wages and a general prevailing rate for legal holiday and overtime work for each craft required for execution of the Contract. The Contractor shall obtain copies of the prevailing rate of per diem wages from the Department of Industrial Relations, Division of Labor Statistics & Research, PO Box 420603, San Francisco, CA 94142-0603, (415) 703-4780; or wage rates may be accessed on the internet at [Prevailing Wage Requirements](#). The Contractor is responsible to read, understand and comply with all the guidelines, including the fine print in the prevailing wage determinations; and shall post a copy of the prevailing wage rates, specific to the Project, at the Project site.
- .2 Wage rates set forth are the minimum that may be paid by the Contractor. Nothing herein shall be construed as preventing the Contractor from paying more than the minimum rates set. No extra compensation will be allowed by the State due to the inability of the Contractor to hire labor at minimum rates, nor for necessity for payment by the Contractor of subsistence, travel time, overtime, or other added compensations, all of which possibilities are elements to be considered and ascertained to the Contractor's own satisfaction in preparing the Bid Form
- .3 If it becomes necessary to employ crafts other than those listed in the General Prevailing Wage Rate booklet, the Contractor shall contact the Division of Labor Statistics and Research as noted above. The rates thus determined shall be applicable as minimum for the contract and incorporated in the bid. When the wage determination shows an expiration date (noted by a double asterisk**), to expire during the term of the contract, the Contractor must call or write the DIR to obtain the new rates and incorporate them in the bid to be applicable for the term of the contract.
- .4 The Contractor and each subcontractor, regardless of tier, shall keep an accurate payroll record showing the names, addresses, social security numbers, work classifications, 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 by the Contractor and/or subcontractor in connection with the Work. Payroll records shall be certified and shall be on forms provided by the Division of Labor Standards Enforcement, or shall contain the same information as those forms. The Contractor's and subcontractor's certified payroll records for each employee shall be submitted with each payment request, covering the period of the payment request unless requested otherwise by the Labor Commissioner of the Department of Industrial Relations pursuant to Labor Code Section 1771.4(c)(2)(b) monthly payrolls should be sent directly to the Department of Industrial Relations in the current prescribed electronic format. Refer to [Certified Payroll Reporting](#) for access to the electronic Certified Payroll (eCRP) Application.
- .5 Labor Compliance Monitoring and Enforcement: This project is subject to monitoring and enforcement by the Department of Industrial Relations (DIR), Compliance Monitoring Unit. All Contractors and subcontractors, regardless of tier, shall be required to comply with the Monitoring and Enforcement Program, including, but not limited to, contractor registration, submittal of electronic certified payroll reports directly to the DIR and cooperation with on-site monitoring by DIR personnel.

Paragraph 3.13, TESTS AND INSPECTIONS

Delete Subparagraph 3.13.1 in its entirety and replace with the following Subparagraph 3.13.1.

3.13.1 The Contractor shall at all times permit the State, its agents, officers, and employees

to visit the Project site and inspect the Work, including shops where the work is in preparation. This obligation shall include maintaining proper facilities and safe access for such inspection. Including, but not limited to providing lifts, ladders, scaffolds, platforms and paths of travel. When the Contract Documents require a portion of the Work to be tested, such portion of the work shall not be covered up until inspected and approved by the State. The Contractor shall be solely responsible for notifying the State where and when the work is ready for inspection and testing and shall give written notice no fewer than two business days prior to the time of inspection. For inspections that require the State Fire Marshal's (SFM) presence, the Contractor shall provide the State's Inspector of Record (IOR) written notice where and when the work is ready for inspection no fewer than three business days prior to the time of inspection.

Should any work be covered without the required testing and approval, such work shall be uncovered and recovered at the Contractor's expense.

Delete Subparagraph 3.13.2 in its entirety and replace with the following Subparagraph 3.13.2.

3.13.2 If the State determines that portions of the Work require additional testing, inspection or approval not included in the Contract Documents, the State will instruct the Contractor, in writing, to make arrangements for additional testing, inspection or approval by an entity acceptable to the State, and the Contractor shall give written notice to the State of where and when tests and inspections will be conducted no fewer than two business days prior to the time of the additional testing, inspection or approval so that the State may observe the procedures. For inspections that require the State Fire Marshal's (SFM) presence, the State's Inspector of Record (IOR) will make the necessary arrangements with the SFM. The Contractor shall provide a written notice no fewer than three business days prior to the time of inspection.

The State will bear the costs except as provided in Subparagraph 3.13.3.

Paragraph 3.25, CONTRACTOR REQUIRED NOTIFICATION OF CHANGES

Delete Paragraph 3.25 in its entirety and replace with the following Paragraph 3.25

3.25 **CONTRACTOR REQUIRED NOTIFICATION OF CHANGES:** The Contractor shall notify the State's Representative in writing of any change to Contractor's name, status, or information including but not limited to:

1. Name
 - a. An amendment is required to change the Contractor's name as listed on this Agreement. Upon receipt of Contractor's notification and legal documentation of the name change, the State will process the amendment. Payment of invoices presented with a new name cannot be paid prior to approval of said amendment.
 - b. The State shall not be liable for penalties or interest on payments which are delayed due to Contractor's change of name and subsequent amendment processing.
2. Address/Location
3. Federal Employer Identification Number (FEIN)
4. Type of Organization or Legal Status – including:
 - a. Corporate
 - b. Partnership
 - c. Individual/Sole-Ownership
 - d. Joint Venture
 - e. Limited Liability Company
 - f. DBA

5. Ownership
6. Officers or Key Personnel
7. License
8. Other (Bankruptcy, Etc.)

Contractor shall immediately provide an updated Standard Form 204 (IRS/FTB form) to the Architectural, Construction and Engineering Contracts Section within five (5) calendar days of any such relevant change.

The State shall not be liable for penalties or interest on payments which are delayed due to Contractor's lack of proper or timely notice and documentation of a relevant change in status which impacts the State's ability to pay.

Contractor shall submit the firm's status change in writing including the Contract Number, Project Title and all necessary backup and legal documentation to support the status change to:

The State Department of General Services, Administration Division
Office of Business and Acquisition Services, Contracts Services Section
707 Third Street, Suite 2-300
West Sacramento, CA 95605-2811

Paragraph 3.4, NONDISCRIMINATION CLAUSE

Delete Paragraph 3.4 in its entirety and replace with the following:

3.4.1. During the performance of this contract, the recipient, contractor, and its subcontractors shall not deny the contract's benefits to any person on the basis of race, religious creed, color, national origin, ancestry, physical disability, mental disability, medical condition, genetic information, marital status, sex, gender, gender identity, gender expression, age, sexual orientation, or military and veteran status, nor shall they discriminate unlawfully against any employee or applicant for employment because of race, religious creed, color, national origin, ancestry, physical disability, mental disability, medical condition, genetic information, marital status, sex, gender, gender identity, gender expression, age, sexual orientation, or military and veteran status. Contractor shall insure that the evaluation and treatment of employees and applicants for employment are free of such discrimination.

3.4.2. Contractor shall comply with the provisions of the Fair Employment and Housing Act (Gov. Code, § 12900 et seq.), the regulations promulgated thereunder (Cal. Code Regs., tit. 2, § 11000 et seq.), the provisions of Article 9.5, Chapter 1, Part 1, Division 3, Title 2 of the Government Code (Gov. Code, §§ 11135-11139.5), and the regulations or standards adopted by the awarding state agency to implement such article.

3.4.3. Contractor or recipient shall permit access by representatives of the Department of Fair Employment and Housing (DEFH) and the awarding state agency upon reasonable notice at any time during the normal business hours, but in no case less than 24 hours' notice, to such of its books, records, accounts, and all other sources of information and its facilities as said Department or Agency shall require to ascertain compliance with this clause.

3.4.4. Recipient, contractor and its subcontractors shall give written notice of their obligations under this clause to labor organizations with which they have a collective bargaining or other agreement.

3.4.5. The contractor shall include the nondiscrimination and compliance provisions of this clause in all subcontracts to perform work under the contract.

SUPPLEMENTARY CONDITIONS

3.4.6 STANDARD CALIFORNIA NONDISCRIMINATION CONSTRUCTION CONTRACT SPECIFICATIONS (GOV. CODE SECTION 12990)

These specifications are applicable to all state contractors and subcontractors having a construction contract or subcontract of \$5,000 or more.

- .1 As used in the specifications:
 - a. "Act" means the Fair Employment and Housing Act.
 - b. "Administrator" means Administrator, Office of Compliance Programs, California Department of Fair Employment and Housing, or any person to whom the Administrator delegates authority.
- .2 Whenever the contractor or any subcontractor subcontracts a portion of the work, it shall include in each subcontract of \$5,000 or more the nondiscrimination clause in this contract directly or through incorporation by reference. Any subcontract for work involving a construction trade shall also include the Standard California Construction Contract Specifications, either directly or through incorporation by reference.
- .3 The contractor shall implement the specific nondiscrimination standards provided in paragraphs 6(a) through (e) of these specifications.
- .4 Neither the provisions of any collective bargaining agreement, nor the failure by a union with whom the contractor has a collective bargaining agreement, to refer members of any group protected by the Act shall excuse the contractor's obligations under these specifications, Government Code section 12990, or the regulations promulgated pursuant thereto .5. In order for the nonworking training hours of apprentices and trainees to be counted, such apprentices and trainees must be employed by the contractor during the training period, and the contractor must have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities. Trainees must be trained pursuant to training programs approved by the U.S. Department of Labor or the California Department of Industrial Relations.
- .5 In order for the nonworking training hours of apprentices and trainees to be counted, such apprentices and trainees must be employed by the contractor during the training period, and the contractor must have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities. Trainees must be trained pursuant to training programs approved by the U.S. Department of Labor or the California Department of Industrial Relations.
- .6 The contractor shall take specific actions to implement its nondiscrimination program. The evaluation of the contractor's compliance with these specifications shall be based upon its effort to achieve maximum results from its actions. The contractor must be able to demonstrate fully its efforts under steps a. through e. below:
 - a. Ensure and maintain a working environment free of harassment, intimidation, and coercion at all sites, and at all facilities at which the contractor's employees are assigned to work. The contractor shall specifically ensure that all foremen, superintendents, and other on-site supervisory personnel are aware of and carry out the contractor's obligations to maintain such a working environment.

- b. Provide written notification within (7) seven days to the director of the DFEH when the referral process of the union or unions with which the contractor has a collective bargaining agreement has impeded the contractor's efforts to meet its obligations.
 - c. Disseminate the contractor's equal employment opportunity policy by providing notice of the policy to unions and training, recruitment and outreach programs and requesting their cooperation in assisting the contractor to meet its obligations; and by posting the company policy on bulletin boards accessible to all employees at each location where construction work is performed.
 - d. Ensure all personnel making management and employment decisions regarding hiring, assignment, layoff, termination, conditions of work, training, rates of pay or other employment decisions, including all supervisory personnel, superintendents, general foremen, on-site foremen, etc., are aware of the contractor's equal employment opportunity policy and obligations, and discharge their responsibilities accordingly.
 - e. Ensure that seniority practices, job classifications, work assignments, and other personnel practices, do not have a discriminatory effect by continually monitoring all personnel and employment related activities to ensure that the equal employment opportunity policy and the contractor's obligations under these specifications are being carried out.
- .7 Contractors are encouraged to participate in voluntary associations that assist in fulfilling their equal employment opportunity obligations. The efforts of a contractor association, joint contractor-union, contractor-community, or other similar group of which the contractor is a member and participant, may be asserted as fulfilling any one or more of its obligations under these specifications provided that the contractor actively participates in the group, makes every effort to assure that the group has a positive impact on equal employment opportunity in the industry, ensures that the concrete benefits of the program are reflected in the contractor's workforce participation, and can provide access to documentation that demonstrates the effectiveness of actions taken on behalf of the contractor. The obligation to comply, however, is the contractor's.
- .8 The contractor is required to provide equal employment opportunity for all persons. Consequently, the contractor may be in violation of the Fair Employment and Housing Act (Government Code section 12990 et seq.) if a particular group is employed in a substantially disparate manner.
- .9 The contractor shall not use the nondiscrimination standards to discriminate against any person because race, religious creed, color, national origin, ancestry, physical disability, mental disability, medical condition, genetic information, marital status, sex, gender, gender identity, gender expression, age, sexual orientation, or military and veteran status.
- .10 The contractor shall not enter into any subcontract with any person or firm decertified from state contracts pursuant to Government Code section 12990.
- .11 The contractor shall carry out such sanctions and penalties for violation of these specifications and the nondiscrimination clause, including suspension, termination and cancellation of existing subcontracts as may be imposed or ordered pursuant to Government Code section 12990 and its implementing regulations by the awarding agency. Any contractor who fails to carry out such sanctions and penalties shall be in violation of these specifications and Government Code section 12990.

SUPPLEMENTARY CONDITIONS

- .12 The contractor shall designate a responsible official to monitor all employment related activity to ensure that the company equal employment opportunity policy is being carried out, to submit reports relating to the provisions hereof as may be required by OCP and to keep records. Records shall at least include for each employee the name, address, telephone numbers, construction trade, union affiliation if any, employee identification number when assigned, status, (e.g., mechanic, apprentice trainee, helper, or laborer), dates of changes in status, hours worked per week in the indicated trade, rate of pay, and locations at which the work was performed. Records shall be maintained in any easily understandable and retrievable form; however, to the degree that existing records satisfy this requirement, contractors shall not be required to maintain separate records.

4. ARTICLE 4 – SUBCONTRACTORS

Paragraph 4.2, SUBCONTRACTUAL RELATIONS

Delete Paragraph 4.2.2 and replace it with the following Paragraph 4.2.2:

4.2.2 Subcontractor Payments: Subcontractors and Sub-subcontractors shall be paid for work performed in accordance with Public Contract Code Sections 10262 and 10262.5.

Delete Paragraph 4.3 and replace it with the following Paragraph 4.3

4.3 DISABLED VETERAN BUSINESS ENTERPRISE PROGRAM: Pursuant to Public Contract Code (PCC) Section 10115 et. seq., the Contractor shall use, employ and utilize Disabled Veteran Business Enterprise (DVBE) subcontractors, sub-subcontractors or material suppliers who were listed in their bid documents for DVBE Program participation, to the full extent of the amount of money and/or percentage of commitment manifested in the bid documents. If the Contractor wishes to substitute any listed DVBE subcontractors, sub-subcontractors or material suppliers for just and legal cause, the Contractor shall follow the dictates of PCC Sections 4107 and 10115.12b, as well as Military and Veterans Code (M&VC) Section 999.5(e) and California Code of Regulations, Title 2, Section 1896.64. The DVBE may only be replaced by another DVBE and shall obtain the written authorization of the State prior to any such substitutions. The Contractor shall not unilaterally substitute a listed DVBE subcontractor, sub-subcontractor or material supplier. Failure of Contractor to seek substitution and adhere to the DVBE participation requirement identified in the bid may be cause for contract termination, recovery of damages under rights and remedies due to the State, and penalties as outlined in M&VC Section 999.9; PCC Sections 4110 and PCC Section 10115.10.

5. ARTICLE 7 – TIME

Paragraph 7.2, CONTRACT TIME

Delete Subparagraph 7.2.1 and replace it with the following Subparagraph 7.2.1:

7.2.1 Time is of the Essence in this Contract. The Contractor shall complete all the Work of the Contract within the Contract Time of:

ONE HUNDRED AND TWENTY (120)

calendar days, starting on the Start Date stipulated in the Notice to Proceed, which the Contractor will receive not less than 5 days in advance.

Add the following Subparagraph 7.2.2:

SUPPLEMENTARY CONDITIONS

7.2.2 Hazardous Materials Removal Work: Within the Contract Time specified in Subparagraph 7.2.1, Contractor shall complete the Hazardous Materials removal work in accordance with the following schedule, commencing on same date as the entire Contract:

.1 Complete Hazardous Materials removal submittals within the following number of calendar days:	FOURTEEN (14)
.2 Allow the following number of calendar days for the State's review and acceptance of Hazardous Materials removal submittals:	FOURTEEN (14)
.3 Allow the following number of calendar days from date of written notification to start of on-site Hazardous Materials removal work:	FOURTEEN (14)
.4 Complete on-site Hazardous Materials removal work within the following number of working days *:	THIRTY (30)
(* not to exceed one 8-hour shift per working day. Working days shall be as specified in Section 01 11 00, Article 1.10.)	
.5 Allow the following number of calendar days for the State's review and certification of Hazardous Materials removal:	SEVEN (7)

Paragraph 7.3, LIQUIDATED DAMAGES

Add the following Subparagraphs 7.3.1 and 7.3.2:

- 7.3.1 The Contractor shall pay to the State the sum of \$1,000 per day for each and every calendar day delay in finishing of Work under this Contract beyond the Contract time.
- 7.3.2 If the Contractor is more than 14 calendar days behind schedule at any point during the Contract Time, based on the latest updated Official Progress Schedule, the State will withhold \$500 per day for each and every day that the Contractor is behind schedule from the monthly payment for that month. If the Contractor recoups all or a portion of the delay during the next pay period, the amount withheld will be reduced accordingly.

Add the following Subparagraphs 7.3.3 and 7.3.4:

- 7.3.3 Hazardous Materials Removal Work: Contractor shall pay to the State the sum of \$1,000 per day for air monitoring by State's Observation Service and other costs for each and every working day's delay in finishing the on-site Hazardous Materials removal work under this Contract beyond the scheduled Contract time set forth in Clause 7.2.3.1.
- 7.3.4 Should Contractor have no work force present for Hazardous Materials removal work on any scheduled work day, Contractor will be required to pay the State the sum of \$1,000 for air monitoring by State's Observation Service and other costs for each such missed work day, unless the Contractor notifies the State Inspector at least 48 hours in advance, for each particular work day which the Contractor expects no work force to be present.

6. ARTICLE 8 – PAYMENTS AND COMPLETION

SUPPLEMENTARY CONDITIONS

Paragraph 8.2, TIMELINESS OF PAYMENTS

Delete Paragraph 8.2.3 and replace it with following Paragraph 8.2.3:

- 8.2.3 The State will make progress payments pursuant to Public Contract Code, Sections 10261 and 10261.5.

Paragraph 8.3, RETENTIONS

Delete Subparagraph 8.3.1.2 and replace it with the following Subparagraph 8.3.1.2:

- .2 The State shall retain 5 percent of the estimated value of Work completed.

Paragraph 8.5, OCCUPANCY BY THE STATE PRIOR TO COMPLETION OF THE WORK

Delete Paragraph 8.5.1 and replace it with the following:

- 8.5.1 The State reserves the right to occupy all or any part of the Project prior to Completion of the Work, upon written notice. Such occupancy or use is herein referred to as Beneficial Occupancy. In this event, the Contractor shall be relieved of responsibility to the State for liability arising out of such occupancy by the State.

7. ARTICLE 11 – INSURANCE AND BONDS

Paragraph 11.1, CONTRACTOR'S INSURANCE

Delete Paragraph 11.1 and replace it with the following 11.1:

11.1 CONTRACTOR'S INSURANCE

11.1.1 General Insurance Requirements:

- .1 Contractor shall procure and maintain insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work hereunder and the results of that work by the Contractor, its agents, representatives, employees or subcontractors.
- .1 Contractor shall furnish the State with certificates and endorsements effecting coverage required by this clause. All certificates and endorsements are to be received and approved by the State before work commences.
- .2 The State reserves the right to require complete, certified copies of all required insurance policies, including endorsements affecting the coverage required by these specifications at any time.
- .2 Insurance Companies shall be acceptable to Department of General Services (DGS) and Office of Risk and Insurance Management (ORIM). Insurance is to be placed with insurers with a current A.M. Best's rating of no less than A-VII, unless otherwise acceptable to DGS, Office of Risk and Insurance Management. Exception may be made for the State Compensation Insurance Fund. If self-insured, review of financial information may be required.
- .3 Except as otherwise provided for Builders Risk/Installation Floater under Clause 11.1.2.4, all coverage shall be in force until the Acceptance of the Work by the Director of DGS. If the insurance expires, the Contractor shall immediately provide a new current certificate or be declared in breach of Contract. The State reserves the right to withhold all progress and retention payments until the breach is cured to the satisfaction of the State. Renewal

SUPPLEMENTARY CONDITIONS

insurance certificates must be tendered to the State prior to or exactly at the expiration of the previous insurance certificate. There shall be no gap in insurance coverage. This renewed insurance shall be in accordance with the terms of the Contract.

- .4 Contractor is responsible to notify the State a minimum of five (5) business days before the effective date of any cancellation, non-renewal or material change that affects required insurance coverage.
- .5 Unless otherwise stated in the contract, the Contractor shall be responsible for any premium deductible or self-insured retention contained within the insurance.
- .6 All insurance policies required by this contract must allow the State to pay and/or act as the contractor's agent in satisfying any self-insured retention (SIR). The choice to pay and/or act as the contractor's agent in satisfying any SIR is at the State's discretion.
- .7 In the event the Contractor fails to keep in effect at all times the specified insurance coverage, the State may, in addition to the remedies noted in Article 11.1.1.3 above and any other remedies it may have, remove the Contractor from the work site and/or may terminate this Contract upon the occurrence of such event, subject to the provisions of this Contract.
In the event, the State elects to remove the Contractor from the work site, the Contractor will not be entitled to additional days or compensation.
- .8 Any insurance required to be carried shall be primary and not excess or contributory, to any other insurance carried by the State.
- .9 Any required endorsement requested by the State must be submitted with all requested certificates of insurance and not substituted by referring to such coverage on the certificate of insurance.
- .10 Minimum Scope of Insurance - Coverage shall be at least as broad as:
 - .1 Insurance Services Office Commercial General Liability coverage (occurrence Form CG 0001).
 - .2 Insurance Services Office Form Number CA 0001 covering Automobile Liability, "any auto", or "all owned, hired and non-owned".
- .11 All coverage and limits available to the contractor shall also be available and applicable to the State.
- .12 Contractor shall procure and maintain insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work hereunder by the Contractor, his agents, representatives, employees, or subcontractors.
- .13 With the exception of Builders Risk/Installation Floater, Contractor shall require and verify that all subcontractors maintain insurance coverage and limits meeting or exceeding all the requirements stated herein. Contractor shall ensure that the Department of General Services and the State of California, its officers, agents, and employees, as additional insured on insurance required from subcontractors but only insofar as the operations under the Contract are concerned. For Commercial General Liability coverage subcontractors shall provide coverage with a form at least as broad as CG 20 38 04 13. The State reserves the right to require the Contractor to provide the subcontractors' insurance certificates and policies, when so directed by the State.

11.1.2 Insurance Requirements: The Contractor shall furnish to the State evidence of the required insurance as follows:

- .1 Commercial General Liability: The Contractor shall maintain commercial general liability with limits of not less than \$5,000,000 per occurrence for bodily injury and property damage liability combined. If Commercial General Liability insurance or other form with a general aggregate limit is used, either the general aggregate limit shall apply separately to this project/location or the general aggregate limit shall be twice the required occurrence limit. If the aggregate applies "per project or location", it shall so state on the certificate. The policy shall include coverage for liabilities arising out of premises, operations, independent contractors, products, completed operations, personal and advertising injury, and liability

SUPPLEMENTARY CONDITIONS

assumed under an insured contract. This insurance shall apply separately to each insured against whom claim is made or suit is brought subject to the Contractor's limit of liability. The policy shall include the Department of General Services and the State of California, its officers, agents, and employees, as additional insureds, but only insofar as the operations under the Contract are concerned.

- .1 Additional Insured coverage shall be provided in the form of an insured endorsement as broad as the (CG 20 10 11 85) to the contractor's insurance policy. All coverage and limits available to the named insured shall be available and applicable to the additional insured. The endorsement must be attached to the certificate.
- .2 Deductibles and Self-Insured Retentions (for Commercial General Liability): Any deductibles or self-insured retentions must be declared to and approved by the State. At the option of the State, either: the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects the State of California and the Department of General Services, its officers, agents, employees and servants or the Contractor shall provide a financial guarantee satisfactory to the State guaranteeing payment of losses and related investigations, claim administration, and defense expenses.
- .2 Automobile Liability: The Contractor shall maintain motor vehicle liability with limits of not less than \$1,000,000 per accident for bodily injury and property damage. The State is to be covered as additional insured with respect to liability arising out of automobiles owned, leased, hired or borrowed by or on behalf of the contractor. The policy shall include the Department of General Services and The State of California, its officers, agents, and employees, as additional insureds, but only insofar as the operations under the Contract are concerned. All coverage and limits available to the named insured shall also be available and applicable to the additional insured.
- .3 Workers' Compensation: The Contractor shall maintain statutory workers' compensation and employer's liability coverage for all its employees who will be engaged in the performance of the Contract, including special coverage extensions where applicable as required by the State of California. The Workers' Compensation policy shall be endorsed with a waiver of subrogation in favor of the State for all work performed by the contractor, its employees, agents and subcontractors. Except for State Fund certificates, all subrogation waiver endorsements shall be submitted on a separate form. The Contractor shall maintain Employer's Liability coverage of \$1,000,000 per accident for bodily injury or disease.

Add Clause 11.1.2.5 as follows:

- .7 Pollution Liability: The Contractor shall maintain, or shall cause the hazardous materials subcontractor(s) to maintain, Pollution Liability coverage for Contractor's liability for bodily injury, property damage and environmental damage resulting from pollution and related cleanup costs directly or indirectly caused by the hazardous material mitigation work, or related services to be performed.
 - .1 Coverage shall be provided for work performed on site as well as during handling and transport of hazardous materials.
 - .2 Limit of not less than \$2,000,000 per occurrence and shall be required.
 - .3 The Contractor, or the hazardous materials mitigation subcontractor(s), shall maintain this required Pollution Liability coverage during each single period, or multiple periods, of hazardous material mitigation work. This coverage may be effected in conjunction with the Contractor's General Liability coverage as long as coverage is provided for the Contractor's liability for bodily injury, property damage and environmental damage resulting from pollution and related cleanup costs directly or indirectly caused by the

scope of work or related services within this contract; a separate pollution limit of insurance is required. In cases where the Pollution Liability coverage is not required for the complete term of the Contract, the length of time, and periods of time, that this insurance coverage is required may be determined by the State in accordance with the commencement and cessation dates in the Contractor's Progress Schedule, as accepted by the State in writing. When timing, conditions, and/or the needs of the State warrant, the State reserves the right to set the term of the Pollution Insurance prior to execution of the contract.

- .1 The Transporter of hazardous materials, whether the Contractor or a subcontractor shall produce to the State a Certificate of Liability Insurance for Pollution Liability Coverage mandated by law with a copy of the MCS-90.
- .2 The MCS-90 Form is effected through the Transporters Automobile liability insurance carrier.
- .4 The policy, whether obtained by the Contractor, or by the hazardous materials mitigation subcontractor(s), shall include the Department of General Services and the State of California, its officers, agents, and employees as additional insureds, but only insofar as the operations under the Contract are concerned. All coverage and limits available to the named insured shall also be available and applicable to the additional insured.
- .5 The insurance certificate shall name the State of California, Department of General Services, as certificate holder.
- .6 If there is change in the hazardous materials mitigation work, then the Pollution Insurance requirements affected by such change must be effected by an Amendment to the Contract.

END OF DOCUMENT

STATE OF CALIFORNIA DEPARTMENT OF GENERAL SERVICES
REAL ESTATE SERVICES DIVISION
PROJECT MANAGEMENT AND DEVELOPMENT BRANCH



Date: September 29, 2025

DOCUMENT 00 91 13

ADDENDUM No. 1 TO THE CONTRACT DOCUMENTS

Bid Due Date – October 22, 2025

**DEMOLITION 345 ASH & 1301 STATE STREET
DEPARTMENT OF HOUSING AND COMMUNITY
DEVELOPMENT
SAN DIEGO, SAN DIEGO COUNTY, CALIFORNIA**

PROJECT NO. 00000000011927A

ACKNOWLEDGE RECEIPT OF THIS ADDENDUM ON BID FORM AND
REVISE THE CONTRACT DOCUMENTS AS FOLLOWS:

PROJECT MANUAL

INTRODUCTORY INFORMATION

1. DOCUMENT 00 01 10 - TABLE OF CONTENTS

SPECIFICATIONS

A. DIVISION 01 - GENERAL REQUIREMENTS

DELETE Section 01 45 33 - Asbestos Abatement Observation in its entirety.
Asbestos is not anticipated to be encountered in this Project.

B. DIVISION 02 – EXISTING CONDITIONS

ADD the attached Section 02 40 00, Demolition, pages 1 through 3.

C. DIVISION 13 - SPECIAL CONSTRUCTION

DELETE Section 13 11 00 – Swimming Pools in its entirety.

2. DOCUMENT 00 01 15 - LIST OF DRAWINGS

A. ARCHITECTURAL

ADD the attached Addendum No. 1 Drawing Sheet A-6, dated 7-21-07; showing additional areas of alterations.

BIDDING REQUIREMENTS

1. DOCUMENT 00 11 00 - INVITATION TO BID

- A. REMOVE DOCUMENT 00 11 00 INVITATION TO BID AND
ADD DOCUMENT 00 11 00 Addendum 1 dated July 21, 1999 making the following changes:

CHANGE bid due date from August 14, 1999 to August 21, 1999.

CHANGE date of Pre-Bid Site Inspection tour from July 24, 1999, to July 31, 1999.

2. DOCUMENT 00 21 00 - INSTRUCTIONS TO BIDDERS

- A. ARTICLE 2., COMPETENCE OF BIDDERS

DELETE Paragraph 2. c., Asbestos Abatement Certification and Registration.

3. DOCUMENT 00 41 00 – BID FORM

- A. CHANGE bid due date from August 14, 1999 to August 21, 1999.

Revised Bid Forms will not be issued to Bidders. Bidders shall change date on originally issued Bid Forms.

CONTRACTING REQUIREMENTS

1. DOCUMENT 00 73 00 – SUPPLEMENTARY CONDITIONS

- A. REMOVE DOCUMENT 00 73 00 SUPPLEMENTARY CONDITIONS AND
ADD DOCUMENT 00 73 00 SUPPLEMENTARY CONDITIONS Addendum 1 dated July 21, 1999 making the following changes:

PARAGRAPH 7.3, LIQUIDATED DAMAGES

CHANGE amount of liquidated damages in Subparagraphs 7.3.1 and 7.3.2
from \$300 to \$500 per calendar day.

SPECIFICATIONS

1. SECTION 05 50 00 – METAL FABRICATIONS

- A. ARTICLE 2.01, FERROUS METALS

ADD the following Subarticle 2.01 E:

E. Steel Tubing: Cold formed, ASTM A500; or hot-rolled, ASTM A501.

DRAWINGS

1. **SHEET D-2**

NOTES

DELETE Note 2 as written and **REPLACE** with the following:

2. See Sheet E-1 for removal of electrical equipment.

2. **SHEETS M-2 AND M-3**

REMOVE Sheets M-2 and M-3 from set of Drawings originally issued and **ADD** Addendum No. 2 Drawing Sheets M-2 and M-3, dated 7/21/99; showing revisions indicated by "cloud" outline and triangle symbol No. 1.

3. **SHEET M-4**

ADD the following notes 5 and 6:

5. Extend new vent lines to outside the building.
6. Extend new drain lines to floor drains.

END OF ADDENDUM NO. 1

ATTACHMENTS:

Specifications, Section 02 40 00, Demolition, pages 1 through 3.

Addendum No. 1 Drawing Sheets A-6, M-2 and M-3.

SECTION 01 10 00

SUMMARY

PART 1 - GENERAL

1.1 SUMMARY

A. Work required to be performed by the Contractor comprises:

1. **Demolition 345 Ash & 1301 State Street**, in conformity with the Drawings and Specifications hereinafter identified; including furnishing all material, labor, plant, tools, equipment, and services necessary therefor and incidental thereto, complete and ready for use, except as hereinafter otherwise provided.

1.2 WORK NOT INCLUDED

A. Except for such auxiliary work as is shown or specified or is necessary as a part of the construction, the following work is NOT included in this Contract.

1. Work shown but marked "NIC" (Not in Contract). "BUA" (By Using Agency), or otherwise designated to be done by others.

1.3 PROJECT INFORMATION

A. Project Location: 345 W. Ash Street and 1301 State Street, San Diego, CA.

B. Project Identification: 00000000011927A

C. Web-Based Project Software: Project software will be used for purposes of managing communication and documents during the construction stage.

1. See Sections 01 31 00 "Project Management and Coordination" for requirements for using web-based project software.

1.4 SPECIFICATIONS

A. The Specifications are those bound in the Project Manual in Books I, II, and III, and enumerated in the Table of Contents. The General Conditions of the Contract for Construction, Supplementary Conditions, and Division 01 of the Specifications apply to all Work of this Contract.

1.5 DRAWINGS

A. The Drawings consist of Drawing Sheets as listed in Document 00 01 15 of Project Manual.

1.6 CONTRACTOR'S SET OF DRAWINGS AND PROJECT MANUALS

- A. State Furnished Drawings and Project Manuals: Upon award of Contract, the State will provide Drawings and Project Manuals upon Contractor's request as follows:
 - 1. Electronic Files in PDF format.
 - 2. Drawings: one set
 - 3. Project Manuals: one set.
 - 4. One set of State furnished Drawings shall be used as record prints.
- B. Additional Sets shall be the responsibility of the contractor.

1.7 PHASED CONSTRUCTION

- A. Construct the Work in phases, with each phase complete as indicated below.
 - 1. Phase 1: Secure permits. Install temporary facilities, install temporary fencing around city block, install permitted traffic control measures.
 - 2. Phase 2: Perform abatement, demo, removal of trees and appurtenances, disconnect and remove site utilities.
 - 3. Phase 3: Install soil stabilization and permanent perimeter fencing.
 - 4. Phase 4: Remove traffic control measures, remove temporary fencing.

1.8 SPECIAL SECURITY PROCEDURES

- A. Provide 24 hour, 7 days a week, electronic surveillance security measures.
- B. California Highway Patrol is the primary policing unit of State Property.
- C. After award of Contract, there will be a project start meeting, at which time security regulations will be reviewed with the Contractor and subcontractors.

1.9 SEQUENCE OF CONSTRUCTION OPERATIONS

- A. Before starting construction operations, confer with the State to review sequence of construction operations.
- B. Prepare schedules as set forth in Section 01 32 00 "Construction Progress Documentation".

1.10 WORK RESTRICTIONS

- A. Comply with restrictions on construction operations.
 - 1. Comply with limitations on use of public streets, work on public streets, rights of way, and other requirements of authorities having jurisdiction.
- B. On-Site Work Hours: Limit work to between 7:30a.m. to 4:30 p.m., Monday through Friday, unless otherwise indicated. Work hours may be modified to meet Project requirements if approved by State and authorities having jurisdiction.

SUMMARY

1. Weekend Hours and State Holidays: Work may be permitted if approval is received from the State at least 3 working days in advance.
 2. Early Morning Hours: Work may be permitted if approval is received from the State at least 3 working days in advance.
- C. Existing Utility Interruptions: Do not interrupt utilities serving facilities occupied by State or others unless permitted under the following conditions and then only after arranging for temporary utility services according to requirements indicated:
1. Notify State's Representative not less than two days in advance of proposed utility interruptions.
 2. Obtain State's written permission before proceeding with utility interruptions.
- D. Noise, Vibration, Dust, and Odors: Coordinate operations that may result in high levels of noise and vibration, dust, odors, or other disruption to State occupancy with State.
1. Notify State's Representative not less than five days in advance of proposed disruptive operations.
 2. Obtain State's Representative's written permission before proceeding with disruptive operations.

1.11 CONTRACTOR'S USE OF SITE AND PREMISES

- A. Use of Site: Contractor shall have limited use of Project site for construction operations as indicated on Drawings by the Contract limits and as indicated by requirements of this Section. Contractor's use of Project site is limited by State's right to perform work or to retain other contractors on portions of Project.

1.12 HAZARDOUS MATERIALS ANTICIPATED ON-SITE

- A. It is anticipated that lead paint, asbestos, and Polychlorinated Biphenyls PCB exist in the work area and may be encountered during execution of the work.
- B. If existing construction materials are identified as containing hazardous materials and/or are disturbed while performing work under this Contract cease work around the suspect area immediately and notify the State. Site conditions and extent of hazardous materials removal related work will be assessed by the State. Affected work activities under this Contract shall not resume until determination is made by the State.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION

SECTION 01 25 00
SUBSTITUTION PROCEDURES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes administrative and procedural requirements for substitutions.

1.2 DEFINITIONS

- A. Substitutions: Changes in products, materials, equipment, and methods of construction from those required by the Contract Documents.
 - 1. Substitutions for Cause: Changes proposed by Contractor that are required due to changed Project conditions, such as unavailability of product, regulatory changes, or unavailability of required warranty terms.

1.3 ACTION SUBMITTALS

- A. Substitution Requests: Submit documentation identifying product or fabrication or installation method to be replaced. Include Specification Section number and title and Drawing numbers and titles.
 - 1. Documentation: Show compliance with requirements for substitutions per Article 3.12.10, Document 00 72 00 "General Conditions of the Contract for Construction", and the following, as applicable:
 - a. Statement indicating why specified product or fabrication or installation method cannot be provided, if applicable.
 - b. Coordination of information, including a list of changes or revisions needed to other parts of the Work and to construction performed by Owner and separate contractors that will be necessary to accommodate proposed substitution.
 - c. Detailed comparison of significant qualities of proposed substitutions with those of the Work specified. Include annotated copy of applicable Specification Section. Significant qualities may include attributes, such as performance, weight, size, durability, visual effect, sustainable design characteristics, warranties, and specific features and requirements indicated. Indicate deviations, if any, from the Work specified.
 - d. Product Data, including drawings and descriptions of products and fabrication and installation procedures.
 - e. Certificates and qualification data, where applicable or requested.
 - f. Contractor's certification that proposed substitution complies with requirements in the Contract Documents, except as indicated in substitution request, is compatible with related materials and is appropriate for applications indicated.
 - g. Contractor's waiver of rights to additional payment or time that may subsequently become necessary because of failure of proposed substitution to produce indicated results.

SUBSTITUTION PROCEDURES

1.4 QUALITY ASSURANCE

- A. Compatibility of Substitutions: Investigate and document compatibility of proposed substitution with related products and materials. Engage a qualified testing agency to perform compatibility tests recommended by manufacturers.

1.5 PROCEDURES

- A. Coordination: Revise or adjust affected work as necessary to integrate work of the approved substitutions.

1.6 SUBSTITUTIONS

- A. Substitutions for Cause: Submit requests for substitution immediately on discovery of need for change.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION

SECTION 01 29 00

PAYMENT PROCEDURES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes administrative and procedural requirements necessary to prepare and process Applications for Payment.

1.2 SCHEDULE OF VALUES

- A. Coordination: Coordinate preparation of the Schedule of Values with preparation of Contractor's construction schedule.
 - 1. Coordinate line items in the Schedule of Values with items required to be indicated as separate activities in Contractor's construction schedule.
 - 2. Submit the Schedule of Values to State at earliest possible date, but no later than 14 days before the date scheduled for submittal of initial Applications for Payment.
- B. Format and Content: Use Project Manual table of contents as a guide to establish line items for the Schedule of Values. Provide at least one line item for each Specification Section.
 - 1. Identification: Include the following Project identification on the Schedule of Values:
 - a. Project name and location.
 - b. State's Project number.
 - c. Contractor's name and address.
 - d. Date of submittal.
 - 2. Arrange the Schedule of Values in tabular form, with separate columns to indicate the following for each item listed:
 - a. Related Specification Section or division.
 - b. Description of the Work.
 - c. Change Orders (numbers) that affect value.
 - d. Dollar value, as a percentage of the Contract Sum to nearest one-hundredth percent, adjusted to total 100 percent. Round dollar amounts to whole dollars, with total equal to Contract Sum.
 - 3. Provide a breakdown of the Contract Sum in enough detail to facilitate continued evaluation of Applications for Payment and progress reports.
 - 4. Allowances: Provide a separate line item in the schedule of values for each allowance.
 - 5. Overhead Costs, Proportional Distribution: Include total cost and proportionate share of general overhead and profit for each line item.
 - 6. Schedule of Values Revisions: Revise the Schedule of Values when Change Orders result in a change in the Contract Sum. Include at least one separate line item for each Change Order.

PAYMENT PROCEDURES

1.3 APPLICATIONS FOR PAYMENT

- A. Each Application for Payment following the initial Application for Payment shall be consistent with previous applications and payments.
- B. Payment Application Times: The date for each progress payment shall be established by the State. The period covered by each Application for Payment is one month.
1. Submit draft copy of Application for Payment three days prior to due date for review by State Construction Supervisor/Inspector.
 2. State Construction Supervisor/Inspector will review the draft with the Contractor to verify requested payment percentages.
 3. Submit Application for Payment upon approval by the State Construction Supervisor/Inspector.
- C. Application for Payment Forms: Submit forms for approval with initial submittal of schedule of values.
- D. Application Preparation: Complete every entry on form. State will return incomplete applications without action.
1. Entries shall match data on the schedule of values and Contractor's construction schedule. Use updated schedules if revisions were made.
 2. Include amounts for work completed following previous Application for Payment, whether or not payment has been received. Include only amounts for work completed at time of Application for Payment.
 3. Include amounts of Change Orders issued before last day of construction period covered by application.
- E. Partial payment for "mobilization" shall be made in percentages as follows (less retainage):
- | Contract Amount Completed | Payment for Mobilization |
|---------------------------|---|
| 5 % | 50% of amount bid for mobilization, or 5% of original Contract amount, whichever is lesser. |
| 10% | 75% of amount bid for mobilization, or 7.5% of original Contract amount, whichever is lesser. |
| 20% | 95% of amount bid for mobilization, or 9.5% of original Contract amount, whichever is lesser. |
| 50% | 100% of amount bid for mobilization, or 10% of original Contract amount, whichever is lesser. |
1. Upon completion of all Work on the Project, payment of any amount bid for mobilization in excess of 10% of the original Contract amount will be paid.
- F. Project Record Drawings: Prior to each Application for Payment review, update Project Record Documents as required by Section 01 77 00 "Closeout Procedures" and submit for the State's review and approval. Monthly Applications for Payment will not be processed without review and approval of Project Record Drawings by the State.
- G. Stored Materials: Include in Application for Payment amounts applied for materials or equipment purchased or fabricated and stored subject to or under the control of the State, but not yet installed. Differentiate between items stored on-site and items stored off-site.
1. Provide certificate of insurance, evidence of transfer of title to State, and consent of surety to payment for stored materials.

PAYMENT PROCEDURES

2. Provide supporting documentation that verifies amount requested, such as paid invoices. Match amount requested with amounts indicated on documentation; do not include overhead and profit on stored materials.
 3. Provide summary documentation for stored materials indicating the following:
 - a. Value of materials previously stored and remaining stored as of date of previous Applications for Payment.
 - b. Value of previously stored materials put in place after date of previous Application for Payment and on or before date of current Application for Payment.
 - c. Value of materials stored since date of previous Application for Payment and remaining stored as of date of current Application for Payment.
- H. Transmittal: Submit Application for Payment signed by the Contractor and State Construction Supervisor/Inspector to the State.
1. Submit with each Application for Payment such evidence as may be necessary to demonstrate costs incurred or estimated to be incurred in accordance with the Schedule of Values during such month and the percentage of completion of each category of Work.
 2. Submit with each Application for Payment certified payroll records for each Contractor's and Subcontractor's employee per Document 00 72 00 "General Conditions of the Contract for Construction." Copies of the monthly payroll shall be sent directly to the Department of Industrial Relations in the current prescribed electronic format with evidence of such submission provided with each Application for Payment to the State.
- I. Initial Application for Payment: Administrative actions and submittals that must precede or coincide with submittal of first Application for Payment include the following:
1. Schedule of values.
 2. Contractor's construction schedule (preliminary if not final).
 3. Key Personnel Names List.
- J. Final Payment Application: After completing Project closeout requirements, submit final Application for Payment with releases and supporting documentation not previously submitted and accepted, including, but not limited to, the following:
1. Evidence of completion of Project closeout requirements in accordance with Section 01 77 00 "Closeout Procedures."
 2. Certification of completion of final punch list items.
 3. Warranty certificates for products and completed operations where required and proof that taxes, fees, and similar obligations were paid.
 4. Evidence that disputes have been settled.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION

PAYMENT PROCEDURES

SECTION 01 31 00

PROJECT MANAGEMENT AND COORDINATION

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes administrative provisions for coordinating construction operations on Project, including, but not limited to, the following:
 - 1. General coordination procedures.
 - 2. Requests for Information (RFIs).
 - 3. Digital project management procedures.
 - 4. Web-based Project management software package.
 - 5. Project meetings.

1.2 SUBMITTALS

- A. Key Personnel Names: Within 15 days of starting construction operations, submit a list of key personnel assignments, including superintendent and other personnel in attendance at Project site. Identify individuals, and their duties and responsibilities, list telephone numbers, and e-mail addresses. Provide names, e-mail addresses, and telephone numbers of individuals assigned as alternates in the absence of individuals assigned to Project. Keep list current at all times.

1.3 GENERAL COORDINATION PROCEDURES

- A. Coordination: Coordinate construction operations 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. Subletting and Subcontracting Responsibilities: Refer to Document 00 72 00 "General Conditions of the Contract for Construction", Article 4.
 - 2. Schedule construction operations in sequence required to obtain the best 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 to ensure maximum performance and accessibility for required maintenance, service, and repair.
 - 4. Coordinate the Work with related work being done by the State and other contractors operating in the area. This coordination shall include reasonable adjustments of schedule in order to allow other contractors or State to do their work. Make provisions for accommodating items installed by the State or under separate contracts.
 - 5. Make adequate provisions to accommodate items scheduled for later installation.
 - 6. Carefully examine Drawings relating to entire work with actual conditions so that Work will be accommodated in spaces provided. General arrangement and location of elements of various systems is shown on the Drawings or specified. Final locations, levels, etc., shall be governed by actual material size used, by building conditions encountered, and by work of all trades. Space conflicts and interferences shall be resolved before work is installed.

PROJECT MANAGEMENT AND COORDINATION

- B. Site Examination: Visit the site prior to commencement of the Work and get familiar with existing conditions. Be prepared to carry out the Work within existing limitations.
 - 1. Inspect and take responsibility for previously prepared or installed work of other contractors before applying subsequent materials or finishes. If work is in unsatisfactory condition, notify the State. Do not proceed until defective work has been corrected.
- C. Allowable Entrance: Contractor, subcontractors, their employees, suppliers and delivery persons shall enter and exit property via designated entrance.
- D. Administrative Procedures: Coordinate scheduling and timing of required administrative procedures with other construction activities to avoid conflicts and to ensure orderly progress of the Work. Such administrative activities include, but are not limited to, the following:
 - 1. Preparation of Contractor's construction schedule.
 - 2. Preparation of the schedule of values.
 - 3. Installation and removal of temporary facilities and controls.
 - 4. Delivery and processing of submittals.
 - 5. Progress meetings.
 - 6. Project closeout activities.

1.4 REQUEST FOR INFORMATION (RFI)

- A. General: Immediately on discovery of the need for additional information, clarification, or interpretation of the Contract Documents, Contractor shall prepare and submit an RFI in the form specified.
 - 1. State will return without response those RFIs submitted to State by other entities controlled by Contractor.
 - 2. Coordinate and submit RFIs in a prompt manner to avoid delays in Contractor's work or work of subcontractors.
- B. Content of the RFI: Include a detailed, legible description of item needing information or interpretation and the following:
 - 1. Project name.
 - 2. State's Representative name.
 - 3. State's Project number.
 - 4. Date.
 - 5. Name of Contractor.
 - 6. RFI number, numbered sequentially.
 - 7. RFI subject.
 - 8. Specification Section number and title and related paragraphs, as appropriate.
 - 9. Drawing number and detail references, as appropriate.
 - 10. Field dimensions and conditions, as appropriate.
 - 11. Contractor's suggested resolution. If Contractor's suggested resolution impacts the Contract Time or the Contract Sum, Contractor shall state impact in the RFI.
 - 12. Contractor's signature.
 - 13. Attachments: Include sketches, descriptions, measurements, photos, Product Data, Shop Drawings, coordination drawings, and other information necessary to fully describe items needing interpretation.
 - a. Include dimensions, thicknesses, structural grid references, and details of affected materials, assemblies, and attachments on attached sketches.

- C. RFI Forms: Form bound in Project Manual or software-generated form with substantially the same content as indicated above, acceptable to the State.
 - 1. Attachments shall be electronic files in PDF format.
- D. State's Action: State will review each RFI, determine action required, and respond.
 - 1. The following Contractor-generated RFIs will be returned without action:
 - a. Requests for approval of submittals.
 - b. Requests for approval of substitutions.
 - c. Requests for approval of Contractor's means and methods.
 - d. Requests for coordination information already indicated in the Contract Documents.
 - e. Requests for adjustments in the Contract Time or the Contract Sum.
 - f. Requests for interpretation of State's actions on submittals.
 - g. Incomplete RFIs or inaccurately prepared RFIs.
 - 2. State's action may include a request for additional information, in which case State's time for response will date from time of receipt by State of additional information.
 - 3. State's action on RFIs that may result in a change to the Contract Time or the Contract Sum may be eligible for Contractor to submit Change Proposal according to Document 00 72 00 "General Conditions of the Contract for Construction".

1.5 DIGITAL PROJECT MANAGEMENT PROCEDURES

- A. State's Data Files Not Available: State will not provide State's CAD drawing digital data files for Contractor's use during construction.
- B. Web-Based Project Management Software Package: Use State's web-based Project management software package for purposes of hosting and managing Project communication and documentation until Acceptance of the Work.
 - 1. The web-based project management system is Procore (www.procore.com) and is updated monthly.

1.6 PROJECT MEETINGS

- A. General: Construction Manager will schedule and conduct, unless otherwise indicated, meetings and conferences at Project site.
 - 1. Attendees: Inform participants and others involved, and individuals whose presence is required, of date and time of each meeting. Notify State of scheduled meeting dates and times a minimum of 10 working days prior to meeting.
 - 2. Agenda: Entity responsible for conducting meeting will prepare the meeting agenda, and distribute the agenda to all invited attendees.
 - 3. Minutes: Entity responsible for conducting meeting will record significant discussions and agreements achieved. Distribute the meeting minutes to everyone concerned, within three days of the meeting.
- B. Preconstruction Conference: State will schedule and conduct a preconstruction conference before starting construction, at a time convenient to State, but no later than 15 days after execution of the Agreement.

1. Attendees: Authorized representatives of State, Construction Manager, Architect or Engineer, and their consultants, State Construction Supervisor/Inspector; Contractor and its superintendent; major subcontractors; and other concerned parties shall attend the conference. Participants at the conference shall be familiar with Project and authorized to conclude matters relating to the Work.
2. Agenda: Discuss items of significance that could affect progress, including but not limited to the following:
 - a. Responsibilities and personnel assignments.
 - b. Tentative construction schedule.
 - c. Phasing.
 - d. Critical work sequencing and long lead items.
 - e. Lines of communications.
 - f. Use of web-based Project software.
 - g. Procedures for processing field decisions and Change Orders.
 - h. Procedures for RFIs.
 - i. Procedures for Quality Assurance / Quality Control (testing and inspecting).
 - j. Procedures for processing Applications for Payment.
 - k. Distribution of the Contract Documents.
 - l. Submittal procedures.
 - m. Sustainable design requirements including commissioning.
 - n. Preparation of Record Documents.
 - o. Use of the premises.
 - p. Allowable entrance.
 - q. Work restrictions.
 - r. Working hours.
 - s. Installation of temporary facilities and controls.
 - t. Storm Water Pollution Control.
 - u. Procedures for disruptions and shutdowns.
 - v. Construction waste management and recycling.
 - w. Parking availability.
 - x. Office, work, and storage areas.
 - y. Equipment deliveries and priorities.
 - z. Safety.
 - aa. Security.
 - bb. Progress cleaning.
3. Minutes: Entity responsible for conducting meeting will record and distribute meeting minutes.

C. Progress Meetings: Construction Manager will conduct progress meetings at weekly intervals.

1. Agenda: Review and correct or approve minutes of previous progress meeting. Review other items of significance that could affect progress. Include topics for discussion as appropriate to status of Project.
 - a. Contractor's Construction Schedule: Review progress since the last meeting.
 - 1) Review schedule for next period.
 - b. Review present and future needs, including the following:
 - 1) Interface requirements.

PROJECT MANAGEMENT AND COORDINATION

- 2) Sequence of operations.
 - 3) Safety.
 - 4) Status of submittals.
 - 5) Status of sustainable design documentation and commissioning.
 - 6) Deliveries.
 - 7) Off-site fabrication.
 - 8) Access.
 - 9) Site use.
 - 10) Temporary facilities and controls.
 - 11) Storm Water Pollution Control.
 - 12) Progress cleaning.
 - 13) Quality Assurance / Quality Control (testing and inspection).
 - 14) Status of correction of deficient items.
 - 15) Field observations.
 - 16) Status of RFIs.
 - 17) Status of Changes in the Work.
 - 18) Payment requests.
2. Minutes: Entity responsible for conducting the meeting will record and distribute the meeting minutes to each party present and to parties requiring information.
- a. Schedule Updating: Issue revised Contractor's construction schedule concurrently with the report of each meeting.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION

SECTION 01 32 00

CONSTRUCTION PROGRESS DOCUMENTATION

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes administrative and procedural requirements for documenting the progress of construction during performance of the Work, including the following:
 - 1. Construction Schedule.
 - 2. Short Interval Schedule.
 - 3. Recovery Schedule.
 - 4. Construction schedule updating reports.
 - 5. Daily construction reports.
 - 6. Unusual event reports.

1.2 DEFINITIONS

- A. Activity: A discrete part of a project that can be identified for planning, scheduling, monitoring, and controlling the construction Project. Activities included in a construction schedule consume time and resources.
 - 1. Critical Activity: An activity on the critical path that must start and finish on the planned early start and finish times.
 - 2. Predecessor Activity: An activity that precedes another activity in the network.
 - 3. Successor Activity: An activity that follows another activity in the network.

1.3 SUBMITTALS

- A. Format for Submittals: Submit required submittals in the following format:
 - 1. Working electronic copy of schedule file in computer scheduling software native file format.
 - 2. PDF file.
- B. Contractor's Construction Schedule: Initial schedule, of size required to display entire schedule for entire construction period.
 - 1. Submit a working digital copy of schedule, using software indicated, and labeled to comply with requirements for submittals.
- C. Construction Schedule Updating Reports: Submit with Applications for Payment.
- D. Short Interval Schedule: Submit at weekly intervals.
- E. Daily Construction Reports: Submit at weekly intervals.
- F. Site Condition Reports: Submit at time of discovery of differing conditions.
- G. Unusual Event Reports: Submit at time of unusual event.

CONSTRUCTION PROGRESS DOCUMENTATION

1.4 QUALITY ASSURANCE

- A. Scheduling Conference: State may conduct conference at Project site to review methods and procedures related to the Contractor's Construction Schedule, including, but not limited to, the following:
1. Review software limitations and content and format for reports.
 2. Verify availability of qualified personnel needed to develop and update schedule.
 3. Discuss constraints, including, but not limited to, phasing work, stages, area separations, interim milestones and beneficial occupancy.
 4. Review delivery dates for State-furnished products.
 5. Review submittal requirements and procedures.
 6. Review time required for review of submittals and resubmittals.
 7. Review requirements for tests and inspections by independent testing and inspecting agencies.
 8. Review time required for Project closeout and State startup procedures, including commissioning activities.
 9. Review list of construction activities to be included in schedule.
 10. Review procedures for updating schedule.

1.5 CONTRACTOR'S CONSTRUCTION SCHEDULE

- A. Computer Scheduling Software: Prepare schedules using current version of a program that has been developed specifically to manage construction schedules.
1. Use Microsoft Project or Primavera for current Windows operating system.
- B. Time Frame: Extend schedule from date established for the Notice to Proceed to date of Completion of the Work.
1. Contract completion date shall not be changed by submission of a schedule that shows an early completion date, unless specifically authorized by Change Order.
- C. Activities: Treat each floor or separate area as a separate numbered activity for each main element of the Work. Comply with the following:
1. Activity Duration: Define activities so no activity is longer than 21 days.
 2. Indicate start and completion dates for the following as applicable:
 - a. Securing of approvals and permits required for performance of the Work.
 - b. Temporary facilities.
 - c. Construction of mock-ups, prototypes and samples.
 - d. State interfaces and furnishing of items, if any.
 - e. Regulatory agency approvals.
 - f. Punch list.
 3. Procurement Activities: Include procurement process activities for the long lead-time items and major items as separate activities in schedule. Procurement cycle activities include, but are not limited to, submittals, approvals, purchasing, fabrication, and delivery.
 4. Submittal Review Time: Include review and resubmittal times indicated in Section 01 33 00 "Submittal Procedures" in schedule. Coordinate submittal review times in Contractor's Construction Schedule with submittal schedule.

5. Punch List and Completion: Include not more than 30 days for completion of punch list items and Completion. No activities other than Startup, Testing and/or Commissioning shall be scheduled during this period.
- D. Constraints: Include constraints and work restrictions indicated in the Contract Documents and as follows in schedule, and show how the sequence of the Work is affected.
 1. Phasing: Arrange list of activities on schedule by phase.
 2. Work Restrictions: Show the effect of the following items on the schedule:
 - a. Use-of-premises restrictions.
 - b. Abatement restrictions.
- E. Contractor's Construction Schedule Updating: At monthly intervals, update schedule to reflect actual construction progress and activities. Issue schedule one week before each regularly scheduled progress meeting.
 1. Revise schedule immediately after each meeting or other activity where revisions have been recognized or made. Issue updated schedule concurrently with the report of each such meeting.
 2. Include a report with updated schedule that indicates every change, including, but not limited to, changes in logic, durations, actual starts and finishes, and activity durations.
 3. As the Work progresses, indicate Completion percentage for each activity.
- F. Distribution of Approved Copies:
 1. Post copies in Project meeting rooms and temporary field offices.
 2. When revisions are made post in the same locations.

1.6 SHORT INTERVAL SCHEDULE

- A. Short Interval Scheduling (SIS) shall be used throughout onsite construction activity. Interval shall be a 3-week projection and shall include week submitted and two weeks thereafter. It shall contain sufficient detail to evaluate daily milestones and manpower/equipment loading and shall identify/tie into monthly updated Schedule.

1.7 RECOVERY SCHEDULE

- A. When periodic update indicates the Work is 21 or more calendar days behind the current approved schedule, submit a separate recovery schedule indicating means by which Contractor intends to regain compliance with the schedule. Indicate changes to working hours, working days, crew sizes, equipment required to achieve compliance, and date by which recovery will be accomplished.
- B. Upon acceptance by the State, incorporate Recovery Schedule into Contractor's Construction Schedule.

1.8 GANTT-CHART SCHEDULE REQUIREMENTS

- A. Gantt-Chart Schedule: Submit a comprehensive, fully developed, horizontal, Gantt-chart-type, Contractor's Construction Schedule within 30 days of date established for the Notice to Proceed.

1. Base schedule on the startup construction schedule and additional information received since the start of Project.
- B. Preparation: Indicate each significant construction activity separately. Identify first workday of each week with a continuous vertical line.

1.9 REPORTS

- A. Daily Construction Reports: Prepare a daily construction report recording the following information concerning events at Project site:
 1. List of subcontractors at Project site.
 2. Approximate count of personnel at Project site.
 3. Equipment at Project site.
 4. Material deliveries.
 5. High and low temperatures and general weather conditions, including presence of rain or snow.
 6. Testing and inspection.
 7. Accidents.
 8. Meetings and significant decisions.
 9. Unusual events.
 10. Stoppages, delays, shortages, and losses.
 11. Meter readings and similar recordings.
 12. Emergency procedures.
 13. Orders and requests of authorities having jurisdiction.
 14. Services connected and disconnected.
 15. Equipment or system tests and startups.
- B. Unusual Event Reports: When an event of an unusual and significant nature occurs at Project site, whether or not related directly to the Work, prepare and submit a special report. List chain of events, persons participating, responses by Contractor's personnel, evaluation of results or effects, and similar pertinent information. Advise State in advance when these events are known or predictable.
 1. Submit unusual event reports directly to State within one day of an occurrence. Distribute copies of report to parties affected by the occurrence.

1.10 PAYMENTS WITHHELD

- A. Progress Payments may be withheld in whole or in part should Contractor fail to comply with requirements of this Section.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION

SECTION 01 33 00

SUBMITTAL PROCEDURES

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Submittal schedule requirements.
2. Administrative and procedural requirements for submittals.

1.2 DEFINITIONS

- ###### A.
- Submittals: Written and graphic information and physical samples that require State's responsive action. Submittals are those submittals indicated in individual Specification Sections. Submittals may be rejected for not complying with requirements.

1.3 SUBMITTAL SCHEDULE

- ###### A.
- Submittal Schedule: Submit a list of submittals, arranged in chronological order by dates required by construction schedule. Include time required for review, ordering, manufacturing, fabrication, and delivery when establishing dates. Include additional time required for making corrections or revisions to submittals noted by State and additional time for handling and reviewing submittals required by those corrections.

1. Schedule submissions during the first 30 days after a date established for the Notice to Proceed and at least 21 days before dates reviewed submittals will be needed and within the time periods specified below.
 - a. Items needed in initial stages of Work or requiring long lead-time for ordering: 30 days.
2. Coordinate submittal schedule with list of subcontracts, the schedule of values, and Contractor's construction schedule.
3. Initial Submittal Schedule: Submit within 10 days of date established for the Notice to Proceed. Include submittals required during the first 90 days of construction. List those submittals required to maintain orderly progress of the Work and those required early because of long lead time for manufacture or fabrication.
4. Final Submittal Schedule: Submit concurrently with the first complete submittal of Contractor's construction schedule.
 - a. Submit revised submittal schedule as required to reflect changes in current status and timing for submittals.
5. Format: Arrange the following information in a tabular format:
 - a. Scheduled date for first submittal.
 - b. Specification Section number and title.
 - c. Description of the Work covered.

SUBMITTAL PROCEDURES

- d. Scheduled date for State's final release or approval.
- e. Scheduled dates for purchasing.
- f. Scheduled dates for installation.

1.4 SUBMITTAL FORMATS

- A. Submittal Information: Include the following information in each submittal:
 - 1. Project name.
 - 2. Date.
 - 3. Name of Contractor.
 - 4. Name of firm or entity that prepared submittal.
 - 5. Unique submittal number, including revision identifier.
 - 6. Submittal purpose and description.
 - 7. Number and title of Specification Section, with paragraph number and generic name for each of multiple items.
 - 8. Drawing number and detail references, as appropriate.
 - 9. Indication of full or partial submittal.
 - 10. Location(s) where product is to be installed, as appropriate.
 - 11. Other necessary identification.
 - 12. Remarks.
 - 13. Signature of transmitter.
- B. Options: Identify options requiring selection by State.
- C. Deviations and Additional Information: On each submittal, clearly indicate deviations from requirements in the Contract Documents, including minor variations and limitations; include relevant additional information and revisions, other than those requested by State on previous submittals. Indicate by highlighting on each submittal or noting on attached separate sheet.
- D. Electronic Submittals: Prepare submittals as PDF package, incorporating complete information into each PDF file. Name PDF file with submittal number.

1.5 SUBMITTAL PROCEDURES

- A. Prepare and submit submittals required by individual Specification Sections. Types of submittals are indicated in individual Specification Sections.
 - 1. Web-Based Project Management Software: Prepare submittals in PDF form, and upload to web-based Project management software website. Enter required data in web-based software site to fully identify submittal.
- B. Coordination: Coordinate preparation and processing of submittals with performance of construction activities.
 - 1. Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals, and related activities that require sequential activity.
 - 2. Submit all submittal items required for each Specification Section concurrently unless partial submittals for portions of the Work are indicated on approved submittal schedule.
 - 3. Coordinate transmittal of submittals for related parts of the Work specified in different Sections, so processing will not be delayed because of need to review submittals concurrently for coordination.

SUBMITTAL PROCEDURES

- a. State reserves the right to withhold action on a submittal requiring coordination with other submittals until related submittals are received.
- C. Processing Time: Allow time for submittal review, including time for resubmittals, as follows. Time for review shall commence on State's receipt of submittal. No extension of the Contract Time will be authorized because of failure to transmit submittals enough in advance of the Work to permit processing, including resubmittals.
 - 1. Initial Review: Allow 7 days for initial review of each submittal. Allow additional time if coordination with subsequent submittals is required. State will advise Contractor when a submittal being processed must be delayed for coordination.
 - 2. Intermediate Review: If intermediate submittal is necessary, process it in same manner as initial submittal.
 - 3. Resubmittal Review: Allow 7 days for review of each resubmittal.
- D. Resubmittals: Make resubmittals in same form and number of copies as initial submittal.
 - 1. Note date and content of previous submittal.
 - 2. Note date and content of revision in label or title block, and clearly indicate extent of revision.
 - 3. Resubmit submittals until they are marked with approval notation from State's action stamp.
- E. Use for Construction: Retain complete copies of submittals on Project site. Use only final action submittals that are marked with approval notation from State's action stamp.

1.6 SUBMITTAL REQUIREMENTS

- A. Product Data: Collect information into a single submittal for each element of construction and type of product or equipment.
 - 1. If information must be specially prepared for submittal because standard published data are unsuitable for use, submit as Shop Drawings, not as Product Data.
 - 2. Mark each copy of each submittal to show which products and options are applicable.
 - 3. Include the following information, as applicable:
 - a. Manufacturer's catalog cuts.
 - b. Manufacturer's product specifications.
 - c. Standard color charts.
 - d. Statement of compliance with specified referenced standards.
 - e. Testing by recognized testing agency.
 - f. Application of testing agency labels and seals.
 - g. Notation of coordination requirements.
 - h. Availability and delivery time information.
 - 4. For equipment, include the following in addition to the above, as applicable:
 - a. Wiring diagrams that show factory-installed wiring.
 - b. Printed performance curves.
 - c. Operational range diagrams.
 - d. Clearances required to other construction, if not indicated on accompanying Shop Drawings.
 - 5. Submit Product Data before Shop Drawings, and before or concurrently with Samples.

SUBMITTAL PROCEDURES

- B. Shop Drawings: Prepare Project-specific information, drawn accurately to scale. Do not base Shop Drawings on reproductions of the Contract Documents or standard printed data.
1. Preparation: Fully illustrate requirements in the Contract Documents. Include the following information, as applicable:
 - a. Identification of products.
 - b. Schedules.
 - c. Compliance with specified standards.
 - d. Notation of coordination requirements.
 - e. Notation of dimensions established by field measurement.
 - f. Relationship and attachment to adjoining construction clearly indicated.
 - g. Seal and signature of professional engineer if specified.
 2. Web-Based Project Management Software: Prepare submittals to accompany Samples in PDF form, and upload to web-based Project software website. Enter required data in web-based software site to fully identify submittal.
 3. Disposition: Maintain sets of approved Samples at Project site, available for quality-control comparisons throughout the course of construction activity. Sample sets may be used to determine final acceptance of construction associated with each set.
- C. Product Schedule: As required in individual Specification Sections, prepare a written summary indicating types of products required for the Work and their intended location. Include the following information in tabular form:
1. Type of product. Include unique identifier for each product indicated in the Contract Documents or assigned by Contractor if none is indicated.
 2. Manufacturer and product name, and model number if applicable.
 3. Number and name of room or space.
 4. Location within room or space.
- D. Qualification Data: Prepare written information that demonstrates capabilities and experience of firm or person. Include lists of completed projects with project names and addresses, contact information of architects and owners, and other information specified.
- E. Design Data: Prepare and submit written and graphic information indicating compliance with indicated performance and design criteria in individual Specification Sections. Include list of assumptions and summary of loads. Include load diagrams if applicable. Provide name and version of software, if any, used for calculations. Number each page of submittal.
- F. Certificates:
1. Certificates and Certifications Submittals: Submit a statement that includes signature of entity responsible for preparing certification. Certificates and certifications shall be signed by an officer or other individual authorized to sign documents on behalf of that entity. Provide a notarized signature where indicated.
 2. Installer Certificates: Submit written statements on manufacturer's letterhead, certifying that Installer complies with requirements in the Contract Documents and, where required, is authorized by manufacturer for this specific Project.
 3. Manufacturer Certificates: Submit written statements on manufacturer's letterhead, certifying that manufacturer complies with requirements in the Contract Documents. Include evidence of manufacturing experience where required.
 4. Material Certificates: Submit written statements on manufacturer's letterhead, certifying that material complies with requirements in the Contract Documents.

SUBMITTAL PROCEDURES

5. Product Certificates: Submit written statements on manufacturer's letterhead, certifying that product complies with requirements in the Contract Documents.
6. Welding Certificates: Prepare written certification that welding procedures and personnel comply with requirements in the Contract Documents. Submit record of AWS B2.1/B2.1M on AWS forms. Include names of firms and personnel certified.

G. Test and Research Reports:

1. Compatibility Test Reports: Submit reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of compatibility tests performed before installation of product. Include written recommendations for substrate preparation and primers required.
2. Field Test Reports: Submit written reports indicating and interpreting results of field tests performed either during installation of product or after product is installed in its final location, for compliance with requirements in the Contract Documents.
3. Material Test Reports: Submit reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting test results of material for compliance with requirements in the Contract Documents.
4. Preconstruction Test Reports: Submit reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of tests performed before installation of product, for compliance with performance requirements in the Contract Documents.
5. Product Test Reports: Submit written reports indicating that current product produced by manufacturer complies with requirements in the Contract Documents. Base reports on evaluation of tests performed by manufacturer and witnessed by a qualified testing agency, or on comprehensive tests performed by a qualified testing agency.
6. Research Reports: Submit written evidence, from a model code organization acceptable to authorities having jurisdiction, that product complies with building code in effect for Project. Include the following information:
 - a. Name of evaluation organization.
 - b. Date of evaluation.
 - c. Time period when report is in effect.
 - d. Product and manufacturers' names.
 - e. Description of product.
 - f. Test procedures and results.
 - g. Limitations of use.

1.7 CONTRACTOR'S REVIEW

- A. Action Submittals and Informational Submittals: Review each submittal and check for coordination with other Work of the Contract and for compliance with the Contract Documents. Note corrections and field dimensions. Mark with approval stamp before submitting to State.
- B. Contractor's Approval: Indicate Contractor's approval for each submittal with. Include name of reviewer, date of Contractor's approval, and statement certifying that submittal has been reviewed, checked, and approved for compliance with the Contract Documents.
 1. State will not review submittals received from Contractor that do not have Contractor's review and approval.

1.8 STATE'S REVIEW

- A. Submittals: State will review each submittal, indicate corrections or revisions required, and return.
 - 1. PDF Submittals: State will indicate, via markup on each submittal, the appropriate action, as follows:
 - a. No Exception Taken: Where the submittal is marked "No Exception Taken," the Work covered by the submittal may proceed, provided it complies with the Contract Documents. Final acceptance will depend on that compliance.
 - b. Exception, See Comments: Where the submittal is marked "Exception, See Comments," the Work covered by the submittal may proceed, provided it complies both with State's notations and corrections on the submittal and the Contract Documents. Final acceptance will depend on that compliance.
 - c. Revise and Resubmit: Where the submittal is marked "Revise and Resubmit," do not proceed with the Work covered by the submittal, including purchasing, fabrication, delivery, or other activity for the product submitted. Revise or prepare a new submittal according to State's notations and corrections.
 - d. Rejected: Where the submittal is marked "Rejected," do not proceed with the Work covered by the submittal. Prepare a new submittal for a product that complies with the Contract Documents.
- B. Partial submittals prepared for a portion of the Work will be reviewed when use of partial submittals has received prior approval from State.
- C. Incomplete submittals are unacceptable, will be considered nonresponsive, and will be returned for resubmittal without review.
- D. State will return without review submittals received from sources other than Contractor.
- E. Submittals not required by the Contract Documents will be returned by State without action.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION

SECTION 01 40 00

QUALITY REQUIREMENTS

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes administrative and procedural requirements for quality assurance and quality control.
- B. Testing and inspection services are required to verify compliance with requirements specified or indicated. These services do not relieve Contractor of responsibility for compliance with the Contract Document requirements.
 - 1. Specific quality-assurance and quality-control requirements for individual work results are specified in their respective Specification Sections. Requirements in individual Sections may also cover production of standard products.
 - 2. Specified tests, inspections, and related actions do not limit Contractor's other quality-assurance and quality-control procedures that facilitate compliance with the Contract Document requirements.
 - 3. Requirements for Contractor to provide quality-assurance and quality-control services required by State, or authorities having jurisdiction are not limited by provisions of this Section.

1.2 DEFINITIONS

- A. Field Quality-Control Tests and Inspections: Tests and inspections that are performed on-site for installation of the Work and for completed Work.
- B. Installer/Applicator/Erector: Contractor or another entity engaged by Contractor as an employee, subcontractor, or sub-subcontractor, to perform a particular construction operation, including installation, erection, application, assembly, and similar operations.
 - 1. Use of trade-specific terminology in referring to a Work result does not require that certain construction activities specified apply exclusively to specific trade(s).
- C. Testing Agency: An entity engaged to perform specific tests, inspections, or both. The term "testing laboratory" shall have the same meaning as the term "testing agency."
- D. Quality-Assurance Services: Activities, actions, and procedures performed before and during execution of the Work, to guard against defects and deficiencies and substantiate that proposed construction will comply with requirements.
- E. Quality-Control Services: Tests, inspections, procedures, and related actions during and after execution of the Work, to evaluate that actual products incorporated into the Work and completed construction comply with requirements. Contractor's quality-control services do not include contract administration activities performed by State.

QUALITY REQUIREMENTS

1.3 CONFLICTING REQUIREMENTS

- A. Conflicting Standards and Other Requirements: If compliance with two or more standards or requirements is specified and the standards or requirements establish different or conflicting requirements for minimum quantities or quality levels, inform the State regarding the conflict. Use the requirement(s) that is/are more stringent and/or of higher quality and/or higher quantity.

1.4 SUBMITTALS

- A. Reports: Prepare and submit certified written reports, products test reports, and documents as required and/or specified.
- B. Permits, Licenses, and Certificates: For State's record, submit copies of permits, licenses, certifications, inspection reports, releases, jurisdictional settlements, notices, receipts for fee payments, judgments, correspondence, records, and similar documents established for compliance with standards and regulations bearing on performance of the Work.

1.5 QUALITY ASSURANCE

- A. Qualifications paragraphs in this article establish the minimum qualification levels required; individual Specification Sections specify additional requirements.
- B. Manufacturer Qualifications: A firm experienced in manufacturing products or systems similar to those indicated for this Project and with a record of successful in-service performance, as well as sufficient production capacity to produce required units. As applicable, procure products from manufacturers able to meet qualification requirements, warranty requirements, and technical or factory-authorized service representative requirements.
- C. Fabricator Qualifications: A firm experienced in producing products similar to those indicated for this Project and with a record of successful in-service performance, as well as sufficient production capacity to produce required units.

1.6 QUALITY CONTROL

- A. State Responsibilities: Where quality-control services are indicated as State's responsibility, State will engage a qualified testing agency to perform these services.
 - 1. Costs for retesting and reinspecting 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.
 - 2. Tests and inspections shall be performed by State's testing laboratory in conformance with California Code of Regulations, Title 24 as noted in individual specifications sections.
- B. Contractor Responsibilities: Perform additional quality-control activities, whether specified or not, to verify and document that the Work complies with requirements.
 - 1. Unless otherwise indicated, provide quality-control services specified and those required by authorities having jurisdiction. Perform quality-control services required of Contractor by authorities having jurisdiction, whether specified or not.
 - 2. Engage a qualified testing agency to perform quality-control services.

QUALITY REQUIREMENTS

- a. Contractor shall not employ same entity engaged by State, unless agreed to in writing by State.
 - b. Testing, Adjusting, and Balancing of Systems: These services shall be provided by approved testing organization in conformance with requirements for services specified in individual sections pertaining to each system.
3. Where quality-control services are indicated as Contractor's responsibility, submit a certified written report, in duplicate, of each quality-control service.
4. Testing and inspection requested by Contractor and not required by the Contract Documents are Contractor's responsibility.
5. Submit additional copies of each written report directly to authorities having jurisdiction, when they so direct.
- C. Contractor's Associated Requirements and Services: Cooperate with agencies and representatives performing required tests, inspections, and similar quality-control services, and provide reasonable auxiliary services as requested. Notify agency sufficiently in advance of operations to permit assignment of personnel. Provide the following:
 1. Access to the Work.
 2. Incidental labor and facilities necessary to facilitate tests and inspections.
 3. Adequate quantities of representative samples of materials that require testing and inspection. Assist agency in obtaining samples.
 4. Facilities for storage and field curing of test samples.
 5. Preliminary design mix proposed for use for material mixes that require control by testing agency.
 6. Security and protection for samples and for testing and inspection equipment at Project site.
- D. Coordination: Coordinate sequence of activities to accommodate required quality-assurance and quality-control services with a minimum of delay and to avoid necessity of removing and replacing construction to accommodate testing and inspection.
 1. Schedule times for tests, inspections, obtaining samples, and similar activities.
- E. The State shall have the right to reject materials and workmanship which are defective or to require their correction. Rejected workmanship shall be satisfactorily corrected and rejected materials shall be removed from the premises without charge to the State. If Contractor does not correct such rejected work within a reasonable time, fixed by a written notice, the State may correct same and charge the expenses to Contractor.
- F. Should it be considered necessary or advisable by the State at any time before Acceptance of the Work to make examination of work already completed by removing or tearing out same, Contractor shall, on request, promptly furnish necessary facilities, labor and materials. If such work is found to be defective in any respect due to fault of Contractor or subcontractor, Contractor shall defray all expenses of such examinations and of satisfactory reconstruction. If, however, such work is found to meet requirements of the Contract, additional cost of labor and material necessarily involved in the examination and replacement will be allowed to the Contractor.

1.7 SPECIAL INSPECTIONS AND TESTS

- A. Special Inspections and Tests: State will engage a qualified testing agency and/or special inspector to conduct special inspections and tests required by authorities having jurisdiction as the responsibility of State.

QUALITY REQUIREMENTS

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 GENERAL

- A. Notify State's Inspector 48 hours in advance of operations to allow for laboratory assignment of personnel and scheduling of tests. When tests or inspections cannot be performed after such notice, reimburse the State for laboratory personnel and travel expenses incurred due to Contractor's negligence.
- B. When additional testing services are needed for Contractor's convenience, employ and pay for services of separate, equally qualified independent testing laboratory; or arrange with State's laboratory and pay for additional samples and tests required for Contractor's convenience.
- C. Prepare each system for testing and balancing. Cooperate with testing agency and provide access to equipment and systems. Operate systems at designated times, and under conditions required for proper testing, adjusting, and balancing.

END OF SECTION

SECTION 01 45 33

ASBESTOS & HAZARDOUS MATERIALS ABATEMENT OBSERVATION

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. The State will contract with an independent Asbestos , Lead, PCB & other Hazardous Materials removal observation service (Observation Service) to perform services as specified herein.

1.02 RELATED SECTIONS

- A. Division 02: Asbestos Abatement.

1.03 SUBMITTALS

- A. Records: Observation Service shall maintain a complete and legible file, in chronological order, containing a copy of each of the following: Field Reports, Submittals, Notifications, Manifests, Certificates, Air Monitoring Results and Laboratory Reports.
- B. Job Book: Upon completion of Abatement Work, Observation Service shall deliver 3 copies of Job Book to State Inspector and others as agreed at pre-project meeting. Job Book shall include records specified, project specifications, Abatement Work narrative covering activities performed, and Record Report(s).

1.04 QUALITY ASSURANCE

- A. Methods and Procedures: Observation Service is required to:
 - 1. Review, and recommend to State for approval, proposed methods for establishing Contained Work Areas Decontamination Enclosure System and Differential Pressure System as well as equipment and personnel to be used. Report the use of proprietary systems.
 - 2. Review, and recommend to State for approval, proposed methods and procedures for Abatement Work.
 - 3. Discuss, and report to State, potential problems arising from use of methods and procedures agreed to or not at pre-project meeting.
 - 4. At least 10 days prior to Site Starting Meeting, propose for approval by State, observation methods to be used and reports to be issued to State.

1.05 COSTS

- A. The cost of the Observation Service will be the State's responsibility. The Contractor however, shall be responsible for any additional services of the Observation Service with respect to:
 - 1. Extended Contractor worker hours (overtime);
 - 2. Additional workdays and hours in excess of those allowed for work completion by the Contractor;
 - 3. Re-inspection and testing as the result of failed clearance inspections and testing's (refer to sub-paragraph 7.3.3 of Section 00 73 00 of the Supplementary Conditions; (4)

ASBESTOS ABATEMENT OBSERVATION

failure to appear for scheduled abatement work and the Observation Service was present and not able to work (refer to sub-paragraph 7.3.4 of Section 00 73 00 of the Supplementary Conditions;

4. 5. Responses to non-compliance with this specification and Section 02 08 00 or releases to the environment of any "Hazardous Materials" associated with the Contractor Work.

PART 2 - PRODUCTS

Not Used

PART 3 - EXECUTION

3.01 OBSERVATION

A. Site-Starting Meeting and Inspection: Observation Service shall:

1. Visually inspect rooms, areas and cavities where Abatement Work is scheduled.
 - a. Determine general acceptability of preparation criteria for Abatement Work to begin and determine areas requiring further pre-project preparation by State.
 - b. Discuss potential problems; such as, details, safety procedures, work procedures or methods.
 - c. Determine acceptable remedies for unacceptable areas and determine remedies for potential problems.
2. Discuss and agree to proposed schedule for Asbestos Abatement Work.

B. Observation Service shall verify that materials delivered to job site are those approved or specified for use on Work.

C. Observation Service shall visually observe the progress of Work, including but not necessarily limited to:

1. Verifying Contained Work Area and Decontamination Enclosure System design and installation.
2. Verifying abatement methods and procedures agreed upon in the pre-project meeting are being followed.
3. Report to State and notify Contractor of unacceptable methods and procedures or unacceptable results of Contractor.
4. Report to State if Contractor fails to correct unacceptable methods and procedures or unacceptable results.
5. Take air tests, core samples and bulk samples in accordance with other sections of this Specification.
6. Conduct periodic reviews of isolation and protective barriers to determine if they are complying with general direction of Project Specifications.

ASBESTOS ABATEMENT OBSERVATION

7. Report to State if Contractor varies from agreed upon schedule.
8. Report to State if Contractor varies from agreed upon scope.

D. Observation Service shall make final visual observation of entire Abatement Project and is required to:

1. Compile list of items required to be revised or replaced.
2. Deliver copy of list to Contractor, State, and others as appropriate.
3. Verify proper revision or replacement of items on list.

3.02 AIR MONITORING

A. Observation Service will perform the following air monitoring throughout Project to ensure Work is done in conformance with fiber concentration limits of local Air Pollution Control District Regulations. Fiber counting conducted by PCM methods shall be performed as described in NIOSH Method 7400 or P&CAM 239. Analysis by TEM methods shall be conducted as described in EPA Yamate Level II.

1. Provide Area Monitoring (benchmarking) prior to isolation and plasticizing operations for each Work Area.
2. Provide Area Monitoring and establish fiber level and TWA during first possible exposure to airborne concentrations of asbestos at start of work. Thereafter, provided same type of Work is being performed, provide Area Monitoring inside Work Area, within breathing zone of selected Contractor's employees (personnel monitoring) and at critical locations adjacent to Work Area, including differential pressure equipment's exhaust for the duration of the Work Shift. At discretion of State, more frequent monitoring of Work Area may be required. Perform the following minimum sampling requirements:

<u>Areas to be Sampled</u>	<u>Minimum No. of Samples</u>	<u>Volume</u>
Per Work Area	3 per day	480 liters
Outside Work Area	3 per day	1200 - 2000 liters
Personnel	4 per day	480 liters

3. Observation Service, upon receipt of clearance certification from Contractor, will take one (1,200-2,800 liters) air sample "Clearance Test" upon completion of each Work Area. Except where debris has been removed from a soil surface, samples shall be collected using aggressive air sampling techniques. For the purpose of this work, decontamination shall be defined as an air sample PCM method or TEM analysis. TEM analysis shall be performed if two consecutive PCM tests fail to provide work area clearance.

Observation Service will Report area air monitoring results collected inside this work area to Contractor and State Inspector prior to start of work on the following day.

- B. State's Observation Service is not for the protection of the Contractor's workers. Contractor shall be fully and solely responsible to take necessary precautions to protect workers and others against exposure. The Contractor shall all take air and material sampling as required by Code and their Work Plan – refer to Section 02 08 00.

3.03 BALLASTS and LAMPS

A. Contractor shall inspect the following and abate in accordance with Section 02 08 00

1. Fluorescent Ballasts
2. Fluorescent light tubes

3.04 FIELD QUALITY CONTROL

A. During progress of Project, Observation Service shall:

1. Make visual observations and compile daily written Field Reports described in this Section and deliver one copy to State Inspector on a daily basis and/or to Project Director as requested.
2. Advise Contractor on the job as to unacceptable methods and procedures and unacceptable results when so observed or monitored by Observation Service.
3. Ensure daily all workers meet training requirements; disallow entry for workers who do not meet or cannot prove qualifications.
4. Ensure warning signs and warning barriers are in appropriate locations.

B. In connection with this Project, "unacceptable methods and procedures, and unacceptable results" shall mean methods and results other than the following:

1. Those recommended by manufacturer of approved products and materials.
2. Those required by pertinent regulations of governmental agencies having jurisdiction.
3. Those required by these Specifications.
4. Those agreed upon at pre-project meeting.

C. Observation Service is not empowered to perform the following:

1. Act for, or in lieu of, representatives of governmental agencies having jurisdiction other than State.
2. Give directions to Contractor, Subcontractor or Workers on the job beyond authority of Observation Service stated in these Specifications or agreed to at pre-project meeting.
3. Revise any part or scope of Contract documents.
4. Approve any change in methods agreed upon at pre-project meeting.

D. Failure of Observation Service to notice unacceptable methods and procedures or unacceptable results during progress of work will not absolve Contractor from responsibility to complete Work in accordance with specified requirements and agreed methods.

E. Prior to commencement of Work, Observation Service shall obtain copy of manifests, certificates and notifications from State's Inspector and review and recommend for approval by State; including, but not limited to the following:

1. Hazardous Waste Transport Manifest:
 - a. Generator Copy.
 - b. TSDf Copy to Generator.
 - c. Land Disposal Restriction Notice and Certificates.
2. Notifications:
 - a. Air Pollution Control District.
 - b. NESHAPS (when required).
 - c. Regional District (when required).

3.05 STOPPING THE WORK

- A. If, at any time, State or Observation Service decides Work practices are violating Specifications, or State, Federal or local regulations to extent of potential endangerment of building users, workers, State employees or public, it will immediately notify Contractor (followed up in writing) that operations shall cease until corrective action is taken by Contractor. Contractor shall take such corrective action before proceeding with Work. Loss or damage due to Stop Work Order(s) shall be Contractor's responsibility. A Stop Work Order, issued by State or Observation Service shall become effective immediately.

3.06 RECORD REPORT

- A. Obtain from State copy(ies) of Survey Edit Report(s) showing asbestos and other hazardous Materials conditions covered in Scope of Work, and document comments or changes to report, to provide for a Record Report of all abatement activities accomplished as part of this Work.

END OF SECTION

SECTION 01 50 00

TEMPORARY FACILITIES AND CONTROLS

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes requirements for temporary utilities, support facilities, fire safety, and security and protection facilities.

1.2 USE CHARGES

- A. Installation, removal, and use charges for temporary facilities shall be included in the Contract Sum unless otherwise indicated. Allow other entities engaged in the Project to use temporary services and facilities without cost, including, but not limited to, State, testing agencies, and authorities having jurisdiction.
- B. Sewer, Drainage, Water, Gas, Telecommunication and Electric Power Service: Pay connection and service use charges for usage by all entities for construction operations.

1.3 SUBMITTALS

- A. Site Utilization Plan: Show temporary facilities, temporary utility lines and connections, staging areas, construction site entrances, vehicle circulation, and parking areas for construction personnel. Show compliance with requirements of authorities having jurisdiction.
- B. Fire-Safety Program and Site Safety Plan: Show compliance with requirements of NFPA 241, California Fire Code Chapter 33, and authorities having jurisdiction. Indicate Contractor personnel responsible for management of fire-prevention program. Include the following in Site Safety Plan:
 - 1. Name and contact information of site safety director.
 - 2. Documentation of the training of the site safety director and fire watch personnel.
 - 3. Procedures for reporting emergencies.
 - 4. Fire department vehicle access routes.
 - 5. Location of fire protection equipment, including portable fire extinguishers, standpipes, fire department connections and fire hydrants.
 - 6. Smoking and cooking policies, designated areas to be used where approved, and signage locations.
 - 7. Location and safety considerations for temporary heating equipment.
 - 8. Hot work permit plan.
 - 9. Plans for control of combustible waste material.
 - 10. Locations and methods for storage and use of flammable and combustible liquids and other hazardous materials.
 - 11. Provisions for site security.
 - 12. Changes that affect this plan.
 - 13. Other site-specific information required by the authorities having jurisdiction.

Retain "Dust- and HVAC-Control Plan" Paragraph below for new construction or renovation work in occupied facilities where review of Contractor's plan for dust control is advisable.

TEMPORARY FACILITIES AND CONTROLS

- C. Dust Plan: Submit coordination drawing and narrative that indicates the dust control measures proposed for use, proposed locations, and proposed time frame for their operation.
- D. Noise and Vibration Control Plan: Identify construction activities that may impact the occupancy and use of adjacent existing buildings, whether occupied by others, or occupied by the State. Include the following:
 - 1. Methods used to meet the goals and requirements of the State.
 - 2. Concrete cutting method(s) to be used.
 - 3. Location of construction devices on the site.
 - 4. Show compliance with the use and maintenance of quieted construction devices for the duration of the Project.
 - 5. Indicate activities that may disturb building occupants and that are planned to be performed during non-standard working hours as coordinated with the State.
 - 6. Indicate locations of sensitive areas or other areas requiring special attention as identified by State. Indicate means for complying with State's requirements.
- E. Covered Walkways: Shop drawings and structural calculations signed by Professional Engineer registered to practice in the State of California.

1.4 QUALITY ASSURANCE

- A. Electric Service: Comply with NECA, NEMA, and UL standards and regulations for temporary electric service. Install service to comply with NFPA 70.
 - 1. Construct and maintain temporary electrical facilities in accordance with California Electrical Code, California Public Utilities Commission "Rules for Overhead Line Construction" (General Order No. 95), and requirements of utility company providing service. Materials, devices, and equipment used for these facilities shall be in good and safe condition but need not be new.
- B. Tests and Inspections: Arrange for authorities having jurisdiction to test and inspect each temporary utility before use. Obtain required certifications and permits.
- C. Temporary Facilities: Obtain required certifications and permits from authorities having jurisdiction. Comply with authorities having jurisdiction requirements for temporary facilities.

1.5 PROJECT CONDITIONS

- A. Temporary Use of Permanent Facilities: Assume responsibility for operation, maintenance, and protection of each permanent service during its use as a construction facility before State's acceptance, regardless of previously assigned responsibilities.
- B. Construction Equipment: Erect, equip, operate, and maintain construction equipment in strict accordance with applicable statutes, laws, ordinances, rules, and regulations of authorities having jurisdiction.
 - 1. Provide and maintain scaffolding, staging, runways, and similar equipment, as needed.

PART 2 - PRODUCTS

2.1 TEMPORARY FACILITIES

- A. Field Offices for the State Use: Not required.
- B. Field Office for Contractor use: Contractor may provide at their expense field office facilities for Contractor's use as desired.

2.2 EQUIPMENT

- A. Fire Extinguishers: Portable, UL rated; with class and extinguishing agent as required by locations and classes of fire exposures.

PART 3 - EXECUTION

3.1 TEMPORARY FACILITIES, GENERAL

- A. Conservation: Coordinate construction and use of temporary facilities with consideration given to conservation of energy, water, and materials. Coordinate use of temporary utilities to minimize waste.
 - 1. See other Sections for disposition of salvaged materials that are designated as State's property.

3.2 INSTALLATION, GENERAL

- A. Locate facilities where they will serve Project adequately and result in minimum interference with performance of the Work. Relocate and modify facilities as required by progress of the Work.
 - 1. Locate facilities to limit site disturbance as specified in Section 01 10 00 "Summary."
- 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.

3.3 TEMPORARY UTILITY INSTALLATION

- A. General: Install temporary service or connect to existing service.
 - 1. Arrange with utility company, State, and existing users for time when service can be interrupted, if necessary, to make connections for temporary services.
- B. Water Service: Install water service and distribution piping in sizes and pressures adequate for construction..
 - 1. Water is available from existing sources on site and shall be metered, and paid for by Contractor.

- C. Sanitary Facilities: Provide temporary toilets, wash facilities, safety shower and eyewash facilities, and drinking water for use of construction personnel. Comply with requirements of authorities having jurisdiction for type, number, location, operation, and maintenance of fixtures and facilities.
 - 1. Use of Permanent Toilets: Use of State's existing or new toilet facilities is not permitted.
 - 2. Maintain toilets in a neat, clean, and orderly manner, and refill all consumables minimum once a week.
- D. Gas Service: Provide gas service and distribution system of sufficient size, and capacity characteristics required for construction operations.
- E. Electric Power Service: Provide electric power service and distribution system of sufficient size, capacity, and power characteristics required for construction operations.
- F. Lighting: Provide temporary lighting that provides adequate illumination for construction operations, observations, inspections, and traffic conditions or as designated by the State.
 - 1. Install and operate temporary lighting that fulfills security and protection requirements without operating entire system.

3.4 SUPPORT FACILITIES INSTALLATION

- A. Comply with the following:
 - 1. Provide construction for temporary field offices, shops, and sheds located within construction area or within 30 feet of building lines that is noncombustible in accordance with ASTM E136. Comply with NFPA 241.
 - 2. Maintain support facilities until State schedules final inspection. Remove before Completion.
- B. Traffic Controls: Comply with requirements of authorities having jurisdiction.
 - 1. Protect existing site improvements to remain, including curbs, pavement, and utilities.
 - 2. Maintain access for fire-fighting equipment and access to fire hydrants.
- C. Parking: Personnel involved in construction operations shall comply with parking and traffic regulations for use of streets, as enforced by authorities having jurisdiction, except for other arrangements as may be agreed to between Contractor and authorities having jurisdiction.
 - 1. Use designated areas of State's existing parking areas for construction personnel.
- D. Storage and Staging: Provide temporary offsite area for storage and staging needs. State will allocate available onsite storage and work areas to Contractor, subject to change as may be necessary by job progress, such as site development or other intervening work.
- E. Dewatering Facilities and Drains: Comply with requirements of authorities having jurisdiction. Maintain Project site, excavations, and construction free of water.
 - 1. Dispose of rainwater in a lawful manner that will not result in flooding Project or adjoining properties or endanger permanent Work or temporary facilities.
 - 2. Remove snow and ice as required to minimize accumulations.
- F. Project Signs: Not required.

- G. Temporary Signs: Provide other signs as indicated and as required to inform public and individuals seeking entrance to Project.
 - 1. Provide temporary, directional signs for construction personnel and visitors.
- H. Other Signs or Advertising: Not permitted, except that Contractor's name may be placed on Contractor's field office.
- I. Temporary Stairs: provide temporary stairs where ladders are not adequate.

3.5 SECURITY AND PROTECTION FACILITIES INSTALLATION

- A. Protection of Existing Facilities: Protect existing vegetation, equipment, structures, utilities, and other improvements at Project site, except those indicated to be removed or altered. Repair damage to existing facilities.
- B. Security: Secure building and grounds at Project site from vandalism or theft, during entire time of Contract.
- C. Environmental Protection: Provide protection, operate temporary facilities, and conduct construction as required to comply with environmental regulations and that minimize possible air, waterway, and subsoil contamination or pollution or other undesirable effects.
 - 1. Comply with work restrictions specified in Section 01 10 00 "Summary."
- D. Stormwater Control: Comply with requirements of authorities having jurisdiction. Provide barriers in and around excavations and subgrade construction to prevent flooding by runoff of stormwater from heavy rains.
- E. Tree and Plant Protection: Install temporary fencing located as indicated or outside the drip line of trees to protect vegetation from damage from construction operations. Protect tree root systems from damage, flooding, and erosion.
 - 1. Irrigate trees, shrubs, and lawn areas which are to remain within work area as directed by State. Construct suitable earth berms around such trees and shrubs as necessary to hold irrigation.
 - 2. Remove and replace trees, shrubs, and lawn areas indicated to remain that are damaged during construction operations or are more than 50 percent dead or in an unhealthy condition before the end of the guarantee period that State determines are incapable of restoring to normal growth pattern.
- F. Existing Landscaped Areas: Return the grounds back to the State in condition equal to or better than existed upon commencement of Work.
- G. Site Enclosure Fence: Before construction operations begin, furnish and install site enclosure fence in a manner that will prevent people from easily entering site except by entrance gates.
 - 1. Extent of Fence: As required to enclose entire Project site or portion determined sufficient to accommodate construction operations.
 - 2. Maintain security by limiting number of keys and restricting distribution to authorized personnel. Furnish one set of keys to State.
- H. Barricades, Warning Signs, and Lights: Comply with requirements of authorities having jurisdiction for erecting structurally adequate barricades, including warning signs and lighting.

TEMPORARY FACILITIES AND CONTROLS

- I. Temporary Egress: Provide temporary egress from existing occupied facilities as indicated and as required by authorities having jurisdiction. Provide signage directing occupants to temporary egress.
- J. Covered Walkway: Erect protective, covered walkway for passage of individuals through or adjacent to Project site. Coordinate with entrance gates, other facilities, and obstructions. Comply with regulations of authorities having jurisdiction and requirements indicated on Drawings.
 - 1. Provide overhead decking, protective enclosure walls, handrails, barricades, warning signs, exit signs, lights, safe and well-drained walkways, and similar provisions for protection and safe passage.
 - 2. Paint and maintain appearance of walkway for duration of the Work.
- K. Temporary Enclosures: Provide temporary enclosures including insulation for protection of construction, in progress and completed, from exposure, foul weather, other construction operations, and similar activities. Provide temporary weathertight enclosure for building exterior.
- L. Temporary Fire Protection: Install and maintain temporary fire-protection facilities of types needed to protect against reasonably predictable and controllable fire losses. Comply with NFPA 241; manage fire-prevention program.

END OF SECTION

SECTION 01 60 00

PRODUCT REQUIREMENTS

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes administrative and procedural requirements for selection of products for use in Project; product delivery, storage, and handling; manufacturers' standard warranties on products; special warranties; and substitutions.

1.2 DEFINITIONS

- A. Products: Items obtained for incorporating into the Work, whether purchased for Project or taken from previously purchased stock. The term "product" includes the terms "material," "equipment," "system," and terms of similar intent.
 - 1. Named Products: Items identified 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.
 - 2. New Products: Items that have not previously been incorporated into another project or facility. Salvaged items or items reused from other projects are not considered new products. Items that are manufactured or fabricated to include recycled content materials are considered new products, unless indicated otherwise.
- B. Substitution: Refer to Section 01 25 00 "Substitution Procedures" for definition and limitations on substitutions.

1.3 QUALITY ASSURANCE

- A. Compatibility of Options: If Contractor is given option of selecting between two or more products for use on Project, select product compatible with products previously selected, even if previously selected products were also options.
- B. Identification of Products: Except for required labels and operating data, do not attach or imprint manufacturer or product names or trademarks on exposed surfaces of products or equipment that will be exposed to view in occupied spaces or on the exterior.
 - 1. Labels: Locate required product labels and stamps on a concealed surface, or, where required for observation following installation, on a visually accessible surface that is not conspicuous.

1.4 COORDINATION

- A. Modify or adjust affected work as necessary to integrate work of approved comparable products and approved substitutions.

PRODUCT REQUIREMENTS

1.5 PRODUCT DELIVERY, STORAGE, AND HANDLING

- A. Deliver, store, and handle products, using means and methods that will prevent damage, deterioration, and loss, including theft and vandalism. Comply with manufacturer's written instructions.
- B. Delivery and Handling:
 - 1. Schedule delivery to minimize long-term storage at Project site and to prevent overcrowding of construction spaces.
 - 2. Coordinate delivery with installation time to ensure minimum holding time for items that are flammable, hazardous, easily damaged, or sensitive to deterioration, theft, and other losses.
 - 3. Deliver products to Project site in an undamaged condition in manufacturer's original sealed container or other packaging system, complete with labels and instructions for handling, storing, unpacking, protecting, and installing.
 - 4. Inspect products on delivery to determine compliance with the Contract Documents and that products are undamaged and properly protected.
- C. Storage:
 - 1. Provide a secure location and enclosure at Project site for storage of materials and equipment.
 - 2. Store products to allow for inspection and measurement of quantity or counting of units.
 - 3. Store materials in a manner that will not endanger Project structure.
 - 4. Store products that are subject to damage by the elements under cover in a weathertight enclosure above ground, with ventilation adequate to prevent condensation and with adequate protection from wind.
 - 5. Store loose granular materials on solid surfaces in well-drained area; prevent mixing with foreign matter.
 - 6. Protect foam plastic from exposure to sunlight, except to extent necessary for period of installation and concealment.
 - 7. Comply with product manufacturer's written instructions for temperature, humidity, ventilation, and weather-protection requirements for storage.
 - 8. Protect stored products from damage and liquids from freezing.

1.6 PRODUCT WARRANTIES

- A. Warranties specified in other Sections shall be in addition to, and run concurrent with, other warranties required by the Contract Documents. Manufacturer's disclaimers and limitations on product warranties do not relieve Contractor of obligations under requirements of the Contract Documents.
 - 1. Manufacturer's Warranty: Written standard warranty form furnished by individual manufacturer for a particular product and issued in the name of the State or endorsed by manufacturer to State.
 - 2. Special Warranty: Written warranty required by the Contract Documents to provide specific rights for State and issued in the name of the State or endorsed by manufacturer to State.
- B. Submittal Time: Comply with requirements in Section 01 77 00 "Closeout Procedures."

PART 2 - PRODUCTS

2.1 PRODUCT SELECTION PROCEDURES

- A. General Product Requirements: Provide products that comply with the Contract Documents, are undamaged and, unless otherwise indicated, are new at time of installation.
1. Provide products complete with accessories, trim, finish, fasteners, and other items needed for a complete installation and indicated use and effect.
 2. Components required to be supplied in quantity within individual Specification Sections shall be the same and shall be interchangeable.
 3. Standard Products: If available, and unless custom products or nonstandard options are specified, provide standard products of types that have been produced and used successfully in similar situations on other projects.
 4. State reserves the right to limit selection to products with warranties meeting requirements of the Contract Documents.
 5. Where products are accompanied by the term "as selected," State will make selection.
 6. Descriptive, performance, and reference standard requirements in the Specifications establish salient characteristics of products.
 7. Or Equal: For products specified by name and accompanied by the term "or equal," "or approved equal," comply with requirements in Section 01 25 00 "Substitution Procedures" to obtain approval for use of an unnamed product.
 - a. Submit additional documentation required by State in order to establish equivalency of proposed products. Unless otherwise indicated, evaluation of "or equal" product status is by the State, whose determination is final.
 - b. Where the words "or equal" are used following trade names, patented products, or proprietary products or methods, they shall be deemed to read "or equal in quality, design, utility and suitability"; as solely determined by the State. Where such trade names, products, or methods are without the use of the words "or equal", they shall be deemed to be followed by the words "or equal in quality, design, utility and suitability" as solely determined by the State.
- B. Visual Selection Specification: Where Specifications include the phrase "as selected by State from manufacturer's full range" or a similar phrase, select a product that complies with requirements. State will select color, gloss, pattern, density, or texture from manufacturer's product line that includes both standard and premium items.
- C. Sustainable Product Selection: Where Specifications require product to meet sustainable product characteristics, select products complying with indicated requirements. Comply with requirements in Division 01 sustainability requirements Section and individual Specification Sections.
1. Select products for which sustainable design documentation submittals are available from manufacturer.

PART 3 - EXECUTION (Not Used)

END OF SECTION

SECTION 01 73 00

EXECUTION

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes general administrative and procedural requirements governing execution of the Work, including, but not limited to, the following:
 - 1. Construction layout.
 - 2. Installation of the Work.
 - 3. Cutting and patching.
 - 4. Protection and repair of installed construction.

1.2 DEFINITIONS

- A. Cutting: Removal of in-place construction necessary to permit installation or performance of subsequent work.
- B. Patching: Fitting and repair work required to restore construction to original conditions after installation of subsequent work.

1.3 QUALITY ASSURANCE

- A. Cutting and Patching: Comply with requirements for and limitations on cutting and patching of construction elements.
 - 1. Structural and Other Construction Elements: When cutting and patching structural elements, or when encountering the need for cutting and patching of elements whose structural function is not known, notify State of locations and details of cutting and await directions from State before proceeding. Shore, brace, and support structural elements during cutting and patching. Do not cut and patch structural elements in a manner that could change their load-carrying capacity or increase deflection. Do not cut and patch other construction elements or components in a manner that could change their load-carrying capacity, that results in reducing their capacity to perform as intended, or that results in increased maintenance or decreased operational life or safety.
 - 2. Patching shall achieve security, strength, and weather protection, and shall preserve continuity of existing fire ratings.
 - 3. Visual Elements: Do not cut and patch construction in a manner that results in visual evidence of cutting and patching. Do not cut and patch exposed construction in a manner that would, in State's opinion, reduce the building's aesthetic qualities. Remove and replace construction that has been cut and patched in a visually unsatisfactory manner. Patching shall successfully duplicate undisturbed adjacent finishes, colors, textures, and profiles. Where there is a dispute as to whether duplication is successful or has been achieved to a reasonable degree, the State's judgment shall be final.

EXECUTION

- B. Manufacturer's Installation Instructions: Obtain and maintain on-site manufacturer's written recommendations and instructions for installation of specified products and equipment.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Comply with requirements specified in other Sections.
 - 1. For projects requiring compliance with sustainable design and construction practices and procedures, use products for patching that comply with sustainable design requirements.
- B. In-Place Materials: Use materials for patching identical to in-place materials. For exposed surfaces, use materials that visually match in-place adjacent surfaces to the fullest extent possible.
 - 1. If identical materials are unavailable or cannot be used, use materials that, when installed, will provide a match acceptable to State for the visual and functional performance of in-place materials. Use materials that are not considered hazardous.
- C. Cleaning Agents: Use cleaning materials and agents recommended by manufacturer or fabricator of the surface to be cleaned. Do not use cleaning agents that are potentially hazardous to health or property or that might damage finished surfaces.
 - 1. Use cleaning products that comply with the California Code of Regulations maximum allowable VOC levels.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Existing Conditions: The existence and location of underground and other utilities and construction indicated as existing are not guaranteed. Before beginning sitework, investigate and verify the existence and location of all underground utilities, and other construction affecting the Work.
- B. Examination and Acceptance of Conditions: Before proceeding with each component of the Work, examine substrates, areas, and conditions, with Installer or Applicator present where indicated, for compliance with requirements for installation tolerances and other conditions affecting performance.
- C. Proceed with installation only after unsatisfactory conditions have been corrected. Proceeding with the Work indicates acceptance of surfaces and conditions.

3.2 PREPARATION

- A. 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, verify dimensions of other construction by field measurements before

fabrication. Coordinate fabrication schedule with construction progress to avoid delaying the Work.

- B. Space Requirements: Verify space requirements and dimensions of items shown diagrammatically on Drawings.
- C. Review of Contract Documents and Field Conditions: Immediately on discovery of the need for clarification of the Contract Documents, submit a request for information to State in accordance with requirements in Section 01 31 00 "Project Management and Coordination."

3.3 CONSTRUCTION LAYOUT

- A. Verification: Before proceeding to lay out the Work, verify layout information shown on Drawings, in relation to the property survey and existing benchmarks and existing conditions. If discrepancies are discovered, notify State promptly.
- B. Engage a land surveyor experienced in laying out the Work, using the following accepted surveying practices:
- C. Site Improvements: Locate and lay out site improvements, including pavements, grading, fill and topsoil placement, utility slopes, and rim and invert elevations.
- D. Building Lines and Levels: Locate and lay out control lines and levels for structures, building foundations, column grids, and floor levels, including those required for mechanical and electrical work. Transfer survey markings and elevations for use with control lines and levels. Level foundations and piers from two or more locations.

3.4 INSTALLATION

- A. Locate the Work and components of the Work accurately, in correct alignment and elevation, as indicated.
 - 1. Make vertical work plumb, and make horizontal work level.
 - 2. Where space is limited, install components to maximize space available for maintenance and ease of removal for replacement.
 - 3. Conceal pipes, ducts, and wiring in finished areas unless otherwise indicated.
- B. Comply with the manufacturer's written instructions and recommendations for installing products in applications indicated.
- C. Install products at the time and under conditions that will ensure satisfactory results as judged by State. Maintain conditions required for product performance until Completion.
- D. Conduct construction operations, so no part of the Work is subjected to damaging operations or loading in excess of that expected during normal conditions of occupancy of type expected for Project.
- E. Sequence the Work and allow adequate clearances to accommodate movement of construction items on-site and placement in permanent locations.
- F. Templates: Obtain and distribute to the parties involved templates for Work specified to be factory prepared and field installed. Check Shop Drawings of other portions of the Work to confirm that

adequate provisions are made for locating and installing products to comply with indicated requirements.

- G. Attachment: Provide blocking and attachment plates and anchors and fasteners of adequate size and number to securely anchor each component in place, accurately located and aligned with other portions of the Work. Where size and type of attachments are not indicated, verify size and type required for load conditions with manufacturer.
 - 1. Mounting Heights: Where mounting heights are not indicated, mount components at heights directed by State.
 - 2. Allow for building movement, including thermal expansion and contraction.
 - 3. 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.
- H. Joints: Make joints of uniform width. Where joint locations in exposed Work are not indicated, arrange joints for the best visual effect, as judged by State. Fit exposed connections together to form hairline joints.
- I. Repair or remove and replace damaged, defective, or nonconforming Work.
 - 1. Comply with Section 01 77 00 "Closeout Procedures" for repairing or removing and replacing defective Work.

3.5 CUTTING AND PATCHING

- A. General: Employ skilled workers to perform cutting and patching. Proceed with cutting and patching at the earliest feasible time, and complete without delay.
 - 1. Cut in-place construction to provide for installation of other components or performance of other construction, and subsequently patch as required to restore surfaces to their original condition.
- B. Existing Warranties: Remove, replace, patch, and repair materials and surfaces cut or damaged during installation or cutting and patching operations, by methods and with materials so as not to void existing warranties.
- C. Temporary Support: Provide temporary support of Work to be cut.
- D. Protection: Protect in-place construction during cutting and patching to prevent damage. Provide protection from adverse weather conditions for portions of Project that might be exposed during cutting and patching operations.
- E. Existing Utility Services and Mechanical/Electrical Systems: Where existing services/systems are required to be removed, relocated, or abandoned, bypass such services/systems before cutting to prevent interruption to occupied areas.
- F. Cutting: Cut in-place construction by sawing, drilling, breaking, chipping, grinding, and similar operations, including excavation, using methods least likely to damage elements retained or adjoining construction. If possible, review proposed procedures with original Installer; comply with original Installer's written recommendations.

- G. 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 practicable, as judged by State. Provide materials and comply with installation requirements specified in other Sections, where applicable.
- H. Paint over complete surface plane, unless otherwise indicated. Over patched wall or ceiling surfaces, paint to nearest cutoff line for entire surface, such as intersection with adjacent wall or ceiling, beam, pilasters, or to nearest opening frame, unless otherwise indicated. Painted surfaces shall not present a spotty, touched-up appearance.
- I. Cleaning: Clean areas and spaces where cutting and patching are performed. Remove paint, mortar, oils, putty, and similar materials from adjacent finished surfaces.

3.6 PROGRESS CLEANING

- A. Clean Project site and work areas daily, including common areas. Enforce requirements strictly. Dispose of materials lawfully.
 - 1. Comply with requirements in NFPA 241 for removal of combustible waste materials and debris.
 - 2. Do not hold waste materials more than seven days during normal weather or three days if the temperature is expected to rise above 80 deg F.
 - 3. Containerize hazardous and unsanitary waste materials separately from other waste. Mark containers appropriately and dispose of legally, according to regulations.
 - a. Use containers intended for holding waste materials of type to be stored.
- B. Site: Maintain Project site free of waste materials and debris.
- C. Work Areas: Clean areas where Work is in progress to the level of cleanliness necessary for proper execution of the Work.
- D. Installed Work: Keep installed work clean. Clean installed surfaces according to written instructions of manufacturer or fabricator of product installed, using only cleaning materials specifically recommended.
- E. Concealed Spaces: Remove debris from concealed spaces before enclosing the space.
- F. Exposed Surfaces: Clean exposed surfaces and protect as necessary to ensure freedom from damage and deterioration at time of Completion.
- G. Waste Disposal: Do not bury or burn waste materials on-site. Do not wash waste materials down sewers or into waterways.

END OF SECTION

SECTION 01 74 19

CONSTRUCTION WASTE MANAGEMENT AND DISPOSAL

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes administrative and procedural requirements for the construction waste management and disposal.
- B. Waste Management Objective for the Project:
 - 1. Project shall minimize the generation of construction and demolition waste at the site.
 - 2. Waste disposal in landfills shall be minimized.

1.2 DEFINITIONS

- A. Construction Waste: Building, structure, and site improvement materials and other solid waste resulting from construction, remodeling, renovation, or repair operations. Construction waste includes packaging.
- B. Demolition Waste: Building, structure, and site improvement materials resulting from demolition operations.
- C. Disposal: Removal of demolition or construction waste and subsequent salvage, sale, recycling, or deposit in landfill, incinerator acceptable to authorities having jurisdiction, or designated spoil areas on Owner's property.
- D. Recycle: Recovery of demolition or construction waste for subsequent processing in preparation for reuse.

1.3 MATERIALS OWNERSHIP

- A. Unless otherwise indicated, demolition and construction waste becomes property of the Contractor.
- B. Historic items, relics, antiques, and similar objects including, but not limited to, cornerstones and their contents, commemorative plaques and tablets, and other items of interest or value to State that may be uncovered during demolition remain the property of State.
 - 1. Carefully salvage in a manner to prevent damage and promptly return to State.

1.4 SUBMITTALS

- A. Construction Waste Estimate: Within 14 calendar days after Start Date of the Work, or prior to any waste removal, whichever occurs sooner, submit construction waste estimate, using the Form 01 74 19.01 "Construction Waste Estimate". Include the following information:
 - 1. Estimate of total job site waste to be generated, including material types and quantities.
 - 2. Estimate of percentages of waste categories to landfill, to be reused, and to be recycled.

- B. Waste Management Report: Upon completion of Work, including final cleanup, provide a final waste management report containing the information required in Form 01 74 19.02 "Waste Management Report". Include the following information:
 - 1. Total quantity of each waste material generated; and the date(s) removed from the project site.
 - 2. Percentages of waste categories to landfill, to be reused, and to be recycled.
 - 3. Identity of the landfill / receiving facility, handling costs, transport costs, tipping fees paid at the landfill, and total landfill costs. Attach copies of manifests, weight tickets, receipts, and invoices.
 - 4. For each material reused or recycled from the Project, include the total costs of handling and transportation, and income. Attach manifests, weight tickets, receipts, and/or invoices.
- C. Qualification Data: For waste management coordinator.

1.5 QUALITY ASSURANCE

- A. Waste Management Coordinator Qualifications: Experienced firm, or individual employed and assigned by General Contractor, with a record of successful waste management coordination of projects with similar requirements. Superintendent may serve as Waste Management Coordinator.
- B. Regulatory Requirements: Comply with transportation and disposal regulations of authorities having jurisdiction.
 - 1. California Department of Resources Recycling and Recovery (CalRecycle); Telephone (916) 341-6300; <https://www.calrecycle.ca.gov/condemo>.
 - 2. Local Integrated Waste Management Programs and Re-Use Programs in the Project area.
 - 3. California Department of Toxic Substances Control (DTSC).

1.6 PERFORMANCE REQUIREMENTS

- A. General: Practice efficient waste management in the use of materials in the course of the Work. Use all reasonable means to divert construction and demolition waste from landfills and incinerators. Facilitate recycling and salvage of materials.
- B. Diversion from Landfill: Waste categories appropriate for diversion from landfill shall include, but not be limited to, the following:
 - 1. Land clearing debris.
 - 2. Soil.
 - 3. Wood: Clean dimensional wood, palette wood.
 - 4. Sheet Wood: Plywood, OSB and particle board.
 - 5. Concrete.
 - 6. Bricks.
 - 7. Concrete Masonry Units (CMU).
 - 8. Asphalt Concrete.
 - 9. Paper.
 - a. Bond.
 - b. Newsprint.
 - c. Cardboard and paper packaging materials.
 - 10. Cement Fiber Products: Shingles, panels, and siding.
 - 11. Metals.
 - a. Ferrous.
 - b. Non-ferrous.

12. Paint.
13. Rigid Foam.
14. Glass.
15. Plastics.
16. Carpet and pad.
17. Beverage containers.
18. Insulation.
19. Gypsum Board.
20. Piping.
21. Electrical conduit.
22. Porcelain Plumbing Fixtures.
23. Fluorescent Light Tubes (per Department of Toxic Substances Control regulations).

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 IMPLEMENTATION

- A. General: Provide handling, containers, storage, signage, transportation, and other items as required to implement waste management during the entire duration of the Contract.
 1. Comply with operation, termination, and removal requirements in Section 01 50 00 "Temporary Facilities and Controls."
- B. Waste Management Coordinator: Engage a waste management coordinator or designate on-site party to be responsible for implementing, monitoring, and reporting status of waste management work.
 1. Distribute copies of the Construction Waste Estimate and Waste Management Report forms to the Job Site Foreman and each Subcontractor.
- C. Training: Train workers, subcontractors, and suppliers on proper waste management procedures, as appropriate for the Work.
- D. Meetings: Conduct Waste Management meetings with subcontractors who generate construction waste. Present current status of the Waste Management Report at regular job-site meetings.

3.2 DEMOLITION AND CONSTRUCTION WASTE MANAGEMENT

- A. Materials Handling Procedures: Provide means by which waste materials will be protected from contamination and means to be employed in reuse or recycling of waste material consistent with requirements for acceptance by receiving facilities.
- B. Separation Facilities: Lay out and label a specific area to facilitate separation of materials for reuse and recycling. Recycling and waste bin areas shall be kept neat and clean and clearly marked to avoid contamination of materials.
- C. Hazardous Wastes: Hazardous wastes shall be separated, stored, and disposed of according to local regulations, and in accordance with specifications for such work as may be included in this Project.

- D. Instruction: Provide on-site instruction of appropriate separation, handling, and recycling, salvage, reuse, and return methods to be used by all parties at appropriate stages of the Project.

3.3 DISPOSAL OF WASTE

- A. General: Except for items or materials to be salvaged or recycled, remove waste materials from Project site and legally dispose of them in a landfill or incinerator acceptable to authorities having jurisdiction.
 - 1. Except as otherwise specified, do not allow waste materials that are to be disposed of accumulate on-site.
 - 2. Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.
- B. Burning: Do not burn waste materials.

3.4 ATTACHMENTS

- A. Form 01 74 19.01: Construction Waste Estimate.
- B. Form 01 74 19.02: Waste Management Report.

END OF SECTION

FORM 01 74 19.01 CONSTRUCTION WASTE ESTIMATE

This form must be completed by the Contractor. Attach additional sheets if necessary. Waste categories appropriate for diversion from landfill shall include but not be limited to categories listed below. Edit the list to suit Project's scope.

PROJECT NAME: _____ PROJECT NUMBER: _____

CONTRACTOR'S / VENDOR'S NAME: _____ DATE: _____

Waste Material (edit to suit)	Unit	Estimated Quantity Generated	Percent to Landfill	Percent Reused	Percent Recycled
Land Clearing Debris	CY				
Soil	CY				
Wood	CY				
Sheet Wood	CY				
Concrete	CY				
Bricks	CY				
Concrete Masonry Units	CY				
Asphalt Concrete	CY				
Paper	CY				
Cement Fiber Products	CY				
Metal (ferrous)	TON				
Metal (non-ferrous)	LBS				
Paint	CF				
Rigid Foam	CF				
Glass	CF				
Plastics	CF				
Carper and Pad	SY				
Beverage Containers	LBS				
Insulation	CF				
Gypsum Board	CF				
Porcelain Plumbing Fixtures	EA				
Fluorescent Light Tubes	EA				

FORM 01 74 19.02 WASTE MANAGEMENT REPORT

QUANTITIES

Waste Material (edit to suit)	Unit	Date Removed	Total Quantity Generated	Percent to Landfill	Percent Reused	Percent Recycled
Land Clearing Debris	CY					
Soil	CY					
Wood	CY					
Sheet Wood	CY					
Concrete	CY					
Bricks	CY					
Concrete Masonry Units	CY					
Asphalt Concrete	CY					
Paper	CY					
Cement Fiber Products	CY					
Metal (ferrous)	TON					
Metal (non-ferrous)	LBS					
Paint	CF					
Rigid Foam	CF					
Glass	CF					
Plastics	CF					
Carper and Pad	SY					
Beverage Containers	LBS					
Insulation	CF					
Gypsum Board	CF					
Porcelain Plumbing Fixtures	EA					
Fluorescent Light Tubes	EA					

FORM 01 74 19.02 WASTE MANAGEMENT REPORT

COST/INCOME

Waste Material (edit to suit)	Unit	Receiving Facility	Landfill Cost in \$			Reused in \$		Recycled in \$	
			Handling	Transport	Fee	Cost	Income	Cost	Income
Land Clearing Debris	CY								
Soil	CY								
Wood	CY								
Sheet Wood	CY								
Concrete	CY								
Bricks	CY								
Concrete Masonry Units	CY								
Asphalt Concrete	CY								
Paper	CY								
Cement Fiber Products	CY								
Metal (ferrous)	TON								
Metal (non-ferrous)	LBS								
Paint	CF								
Rigid Foam	CF								
Glass	CF								
Plastics	CF								
Carper and Pad	SY								
Beverage Containers	LBS								
Insulation	CF								
Gypsum Board	CF								
Porcelain Plumbing Fixtures	EA								
Fluorescent Light Tubes	EA								
TOTAL:									

FORM 01 74 19.02 WASTE MANAGEMENT REPORT

QUANTITIES

Waste Material (edit to suit)	Unit	Date Removed	Total Quantity Generated	Percent to Landfill	Percent Reused	Percent Recycled
Land Clearing Debris	CY					
Soil	CY					
Wood	CY					
Sheet Wood	CY					
Concrete	CY					
Bricks	CY					
Concrete Masonry Units	CY					
Asphalt Concrete	CY					
Paper	CY					
Cement Fiber Products	CY					
Metal (ferrous)	TON					
Metal (non-ferrous)	LBS					
Paint	CF					
Rigid Foam	CF					
Glass	CF					
Plastics	CF					
Carper and Pad	SY					
Beverage Containers	LBS					
Insulation	CF					
Gypsum Board	CF					
Porcelain Plumbing Fixtures	EA					
Fluorescent Light Tubes	EA					

FORM 01 74 19.02 WASTE MANAGEMENT REPORT

COST/INCOME

Waste Material (edit to suit)	Unit	Receiving Facility	Landfill Cost in \$			Reused in \$		Recycled in \$	
			Handling	Transport	Fee	Cost	Income	Cost	Income
Land Clearing Debris	CY								
Soil	CY								
Wood	CY								
Sheet Wood	CY								
Concrete	CY								
Bricks	CY								
Concrete Masonry Units	CY								
Asphalt Concrete	CY								
Paper	CY								
Cement Fiber Products	CY								
Metal (ferrous)	TON								
Metal (non-ferrous)	LBS								
Paint	CF								
Rigid Foam	CF								
Glass	CF								
Plastics	CF								
Carper and Pad	SY								
Beverage Containers	LBS								
Insulation	CF								
Gypsum Board	CF								
Porcelain Plumbing Fixtures	EA								
Fluorescent Light Tubes	EA								
TOTAL:									

SECTION 01 74 20

RECYCLED CONTENT CERTIFICATION

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes administrative and procedural requirements for the recycled content certification.

1.2 REFERENCES

- A. State Agency Buy Recycled Campaign: <https://www.calrecycle.ca.gov/buyrecycled/stateagency>.
 - 1. Access this website for information on the Buy Recycled Campaign.

1.3 DEFINITIONS

- A. Product Categories: Recycled content categories identified for purchasing and reporting of products.
 - 1. Paper products.
 - 2. Printing and writing papers.
 - 3. Soil amendments and toppings.
 - 4. Erosion control products.
 - 5. Glass products.
 - 6. Lubricating oils.
 - 7. Plastic products.
 - 8. Paint.
 - 9. Tire-derived products.
 - 10. Antifreeze.
 - 11. Metals.
 - 12. Pavement surfacing.
- B. Recycled Content Product (RCP): All materials, goods, and supplies that are from one of the sixteen (16) Product Categories that meet the requirements identified in Public Contract Code, Section 12209, including any good or material that has been reused or refurbished without substantial alteration of its original form. For reused or refurbished products, there is no minimum content requirement.
- C. Non-Recycled Content Product (non-RCP): All materials, goods, and supplies that are from one of the sixteen (16) Product Categories having no recycled content or less than the minimum content or not meeting recyclability requirements, as identified in Public Contract Code, Section 12209.

1.4 REQUIREMENTS

- A. Recycled content reporting for the Project.

RECYCLED CONTENT CERTIFICATION

1. Document and report the percentage of recycled content in materials, products, equipment and furnishings installed and provided for this Project.
2. State Agency Buy Recycled Campaign (SABRC) is a joint effort between the Department of General Services and the California's Department of Resources Recycling and Recovery (CalRecycle) to implement State law. Public Contract Code, Sections 12200-12320, requires State agencies to purchase recycled content products instead of non-recycled content products in sixteen (16) product categories whenever price, quality, and availability are comparable, to ensure that a minimum percentage of purchases in those categories have recycled content, and report these purchases annually to CalRecycle. This certification and reporting are utilized to comply with those requirements.
3. State and State's contractor(s) are required to purchase recycled content products in sufficient quantities to ensure that mandated recycled content products procurement goals are attained within sixteen (16) product categories.
4. The sixteen (16) product categories and their respective minimum postconsumer-content requirements are outlined in SABRC Handout on CalRecycle website:
<https://www2.calrecycle.ca.gov/Docs/Web/114687> .
5. In order to help state agencies identify all reportable purchases and all reportable recycled content products purchases, Contractor is mandated by the Public Contract Code, Section 12205 to certify in writing to the State the minimum percentage, if not the exact percentage, of postconsumer recycled-content material in the products, materials, goods, and supplies offered or sold to the State regardless of whether the product meets the requirements of Public Contract Code, Section 12209.
6. All products that can be classified as being in one of the sixteen (16) categories must be included in the reporting, whether the product is recycled content products or non- recycled content products. Only products that can be classified in one of the categories shall be reported.

1.5 SUBMITTALS

- A. Form 01 74 20.01 "Recycled Content Certification Worksheet": Submit with each product submittal from one of the sixteen (16) Product Categories, containing the following information:
 1. Product Description, with applicable specification section of product.
 2. Quantity of product.
 3. Estimated material dollar value including any taxes and delivery cost.
 4. Designate the Product Category for each product listed.
 5. Designate whether product is a Recycled Content Product.
 6. Estimate of percentage of material content.
 7. Attach a copy of the manufacturer's or vendor's data sheet showing recycled content percentages if product is reported as a Recycled Content Product.
- B. Form 01 74 20.02 "State Agency Buy Recycled Campaign Procurement Summary": Submit with each product submittal from one of the sixteen (16) Product Categories, containing the following information:
 1. Product Category.
 2. All reportable purchases, quantity and dollar value including any taxes and delivery cost.
 3. Recycled Content Product purchases, quantity and dollar value including any taxes and delivery cost.
 4. Percent of Recycled Content Product purchases, quantity and dollar value including any taxes and delivery cost.

1.6 CLASSIFICATION OF PRODUCTS

RECYCLED CONTENT CERTIFICATION

- A. Recycled content products and non-recycled content products that are made from multiple material types should be reported in the product category of the material type representing most of the product.

PART 2 - PRODUCTS (Not used)

PART 3 - EXECUTION

3.1 IMPLEMENTATION

- A. Recycled Content Manager: Designate an individual responsible for instructing suppliers and subcontractors, and overseeing and documenting results of Recycled Content Certification for the Project.
- B. Recycled Content Manager shall document results of submitted Form 01 74 20.01 "Recycled Content Certification Worksheets" on the Form 01 74 20.02 "State Agency Buy Recycled Campaign Procurement Summary", in total for each product category. Only reportable products from one of the sixteen (16) categories should be recorded.
- C. Distribution:
 - 1. Recycled Content Manager shall insure that Form 01 74 20.01 "Recycled Content Certification Worksheet" is submitted with each product submittal from one of the sixteen (16) Product Categories or at intervals agreed to by the State's Representative for monitoring of the program.
 - 2. Recycled Content Manager shall provide copies of the Form 01 74 20.02 "State Agency Buy Recycled Campaign Procurement Summary" at intervals agreed to by the State's Representative for monitoring of the program. At the conclusion of the construction and prior to final payment, Recycled Content Manager shall provide a copy of the final Form 01 74 20.02 "State Agency Buy Recycled Campaign Procurement Summary" under provisions of Section 01 77 00 "Closeout Procedures".

3.2 ATTACHMENTS

- A. Form 01 74 20.01: Recycled Content Certification Worksheet (Example).
 - 1. An example of a completed form is attached for Contractor's reference. An electronic version of this form for Contractor's use will be provided by the State at the Project start meeting.
- B. Form 01 74 20.02: State Agency Buy Recycled Campaign Procurement Summary (Example).
 - 1. An example of a completed form is attached for Contractor's reference. An electronic version of this form for Contractor's use will be provided by the State at the Project start meeting.

END OF SECTION

FORM 01 74 20.02 STATE AGENCY BUY RECYCLED CAMPAIGN PROCUREMENT SUMMARY (EXAMPLE)

Attach copies of the recycled-content certification form(s) and/or other documentation for each product that contains any amount of recycled material. Refer to footnotes following this form.

PROJECT NAME: Visitor's Non-Secure Entrance, Statewide Youth Correctional Agency **PROJECT NUMBER:** 000000000001234

CONTRACTOR'S / VENDOR'S NAME: XYZ Contractors **DATE:** December 1, 2024

ADDRESS: 4300 Pleasant Valley Dr, Lincoln Logs, CA 95000 **PROJECT DIRECTOR:** (AS NAMED)

PHONE: (123) 456-7890 **EMAIL:** Super.Intendent@xyzcont.com

Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7
Product Category ¹	All Reportable Purchases (QUANTITY) ²	All Reportable Purchases (DOLLARS) ³	RCP Purchases (QUANTITY) ⁴	RCP Purchases (DOLLARS) ⁵	Percent of RCP (QUANTITY) ⁶	Percent of RCP (DOLLARS) ⁷
Paper products		\$ 18,000.00		\$ 12,500.00		70%
Printing and writing paper		\$ 0.00		\$ 0.00		0%
Soil amendments and toppings	0(cu yd)	\$ 0.00	0(cu yd)	\$ 0.00	0%	0%
Erosion control products		\$ 20,000.00		\$ 20,000.00		100%
Glass products		\$ 35,000.00		\$ 5,000		14%
Lubricating oils	0(gal)	\$ 0.00	0(gal)	\$ 0.00	0%	0%
Plastic products		\$ 4,000.00		\$ 1,500.00		38%
Paint	300(gal)	\$ 8,000.00	0(gal)	\$ 0.00	0%	0%
Tires	0	\$ 0.00	0	\$ 0.00	0%	0%
Tire-derived products		\$ 2,000.00		\$ 2,000.00		100%
Antifreeze	0(gal)	\$ 0.00	0(gal)	\$ 0.00	0%	0%
Metal		\$ 11,000.00		\$ 6,000.00		54%
Carpet	12,000 (sq ft)	\$ 78,000.00	4,000 (sq ft)	\$ 42,000.00	33%	54%
Pavement surfacing	150 (ton)	\$50,000	75 (ton)	\$ 20,000.00	50%	40%

STATE AGENCY BUY RECYCLED CAMPAIGN PROCUREMENT SUMMARY (EXAMPLE)

Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7
Product Category ¹	All Reportable Purchases (QUANTITY) ²	All Reportable Purchases (DOLLARS) ³	RCP Purchases (QUANTITY) ⁴	RCP Purchases (DOLLARS) ⁵	Percent of RCP (QUANTITY) ⁶	Percent of RCP (DOLLARS) ⁷
Building finishes		\$ 25,000.00		\$ 5,000.00		20%
Textiles		\$12,000.00		\$2,000.00		17%
		Total ⁸ : \$ 263,000		Total ⁹ : \$ 116,000		Total ¹⁰ : 44.1%

Footnotes

Attach copies of the recycled-content certification forms and/or other documentation for each product.

Note: All purchases within these product categories, regardless of the source of the product or the type of contract used to purchase them, should be included in your report. Include **all** product purchases — RCPs and non-RCPs.

1. Include **all** purchases (RCPs and non-RCPs) within the 16 product categories. RCPs outside of the 16 product categories **cannot** be counted toward attaining the procurement goals and are not reportable.
2. Indicate the quantity (units) of **all** purchases (RCPs and non-RCPs) in each product category during the course of the project. Quantities do not need to be reported for the product categories with shading.
3. Indicate the total dollars spent on **all** purchases (RCPs and non-RCPs) in each product category purchased during the course of the project.
4. Indicate the total quantity (units) of RCPs purchased during the course of the project. Quantities do not need to be reported for the product categories with shading.
5. Indicate the total dollars spent on RCPs during the course of the project for each category.
6. Indicate the percentage of RCPs purchased. The percent recycled is calculated by dividing the figure in column 4 by the figure in column 2 and multiplying by 100. Percentages do not need to be calculated for the product categories with shading.
7. Indicate the percentage of total dollars spent on RCPs in each category. The percentage recycled is calculated by dividing the figure in column 5 by the figure in column 3 and multiplying by 100.
8. The total of column 3 should be equivalent to the total estimated dollars spent on **all** products (RCPs and non-RCPs) during the course of the project.
9. The total of column 5 should be equivalent to the estimated total dollars spent on reportable RCPs during the course of the project.
10. Column 7 is calculated by dividing the figure in column 5 by the figure in column 3 and multiplying by 100.

SECTION 01 77 00
CLOSEOUT PROCEDURES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes administrative and procedural requirements for Contract closeout, including, but not limited to, the following:
 - 1. Completion procedures.
 - 2. Warranties.
 - 3. Record Drawings.
 - 4. Final cleaning.

1.2 DEFINITIONS

- A. Punch-list (List of Incomplete Items): Contractor-prepared list of items to be completed or corrected, prepared for the State's use prior to State's inspection, to determine if the Work is complete.

1.3 SUBMITTALS

- A. Product Data: For each type of cleaning agent.
- B. Contractor's Punch-list: Initial submittal at Beneficial Occupancy.
- C. Certified Punch-list: Final submittal at Completion.
- D. Certificate of Insurance: For continuing coverage.
- E. Guaranties, Warranties and Bonds: Submittal prior to Final Inspection.
- F. Record Drawings: Comply with the following:
 - 1. Number of Copies: Submit one set(s) of marked-up record prints.
- G. Record Drawings Reports: Submit written report monthly at the time of Application for Payment submittal indicating items incorporated into Project Record Drawings concurrent with progress of the Work, including revisions, concealed conditions, field changes, product selections, and other notations incorporated.
- H. Certification of Disabled Veteran Business Enterprise Participation: Submit Form STD 817 with final Application for Payment.
- I. Certification of Small Business Participation:
 - 1. Preliminary Report upon Completion of the Work.
 - 2. Final Report upon receipt of Final Payment.

- J. Waste Management Report: Submittal prior to Final Inspection. Provide as specified in individual Specifications Section.
- K. Recycled-Content Certification Worksheet: Submittal prior to Final Inspection. Provide as specified in individual Specifications Section.
- L. State Agency Buy Recycled Campaign Procurement Summary: Submittal prior to Final Inspection. Provide as specified in individual Specifications Section.

1.4 COMPLETION PROCEDURES

- A. Punch-list: Prepare and submit a list of items to be completed and corrected a minimum of 10 calendar days prior to the end of the Contract Time.
- B. Submittals Prior to Completion: Before requesting final inspection for determining the date of Completion of the Work, complete the following.
 - 1. Certificates of Release: Obtain and submit releases from authorities having jurisdiction, permitting State unrestricted use of the Work and access to services and utilities. Include occupancy permits, operating certificates, and similar releases.
 - 2. Submit closeout submittals specified in other Division 01 Sections, including Waste Management Report and Recycled-Content Certification Worksheet.
 - 3. Submit Project Record Drawings, and similar final record information.
 - 4. Submit closeout submittals specified in individual Sections, including warranties, certifications, training and similar documents.
- C. Procedures Prior to Completion: Complete the following a minimum of 7 days prior to requesting inspection for determining date of Completion of the Work. List items below that are incomplete at time of request.
 - 1. Participate with State in conducting inspection and walkthrough with authorities having jurisdiction.
 - 2. Terminate and remove temporary facilities from Project site, along with construction tools, and similar elements.
 - 3. Complete final cleaning requirements.
- D. Final Inspection: Submit a written request for final inspection to determine Completion a minimum of 7 days prior to date the Work will be completed and ready for final inspection and tests. On receipt of request, State will either proceed with inspection or notify Contractor of unfulfilled requirements. After inspection, State will notify Contractor of items, either on Contractor's list or additional items identified by State, that must be completed or corrected before Acceptance of the Work.
 - 1. Request reinspection when the Work identified in previous inspections as incomplete is completed or corrected.
- E. Submittals After Final Inspection:
 - 1. Submit a final Application for Payment in accordance with Section 01 29 00 "Payment Procedures."
 - 2. Certificate of Insurance: Submit evidence of final, continuing insurance coverage complying with insurance requirements.
 - 3. Certified Punch-list: Submit certified copy of punch list, endorsed and dated by Architect or Engineer. Certified copy of the list shall state that each item has been completed or otherwise resolved for acceptance.

CLOSEOUT PROCEDURES

- F. Completion of the Work date and Acceptance of the Work will be determined as specified in Document 00 72 00 "General Conditions of the Contract for Construction", Article 8.6.

1.5 PUNCH-LIST ITEMS

- A. Organization of List: Include name and identification of each space and area affected by construction operations for incomplete items and items needing correction including, if necessary, areas disturbed by Contractor that are outside the limits of construction.
1. Organize list of spaces in sequential order, starting with exterior areas first and proceeding from lowest floor to highest floor, listed by room or space number.
 2. Organize items applying to each space by major element, including categories for ceilings, individual walls, floors, equipment, and building systems.
 3. Include the following information on each page:
 - a. Project name and number.
 - b. Date.
 - c. Page number.
 4. Submit list of incomplete items in the following format:
 - a. MS Excel Electronic File: State will return annotated file.

1.6 CONTRACTOR'S CERTIFICATION OF DISABLED VETERAN BUSINESS ENTERPRISE (DVBE) PARTICIPATION

- A. Submit, upon Completion of the Work, together with a final Application for Payment, complete and accurate Form STD 817 "Prime Contractor's Certification – DVBE Subcontractor Report". The State shall review the Form STD 817, and if it is determined to be complete and accurate, the payment will be authorized.
- B. If the Form STD 817 is late or determined to be incomplete or inaccurate, the State shall withhold ten thousand dollars (\$10,000) from the final payment, or the full final payment if less than ten thousand dollars (\$10,000), and provide the Contractor with a notice allowing at least 15 days, but not more than 30 days to cure the defect.
1. If the Contractor does not comply by the deadline identified in the Cure Notice, the State shall permanently deduct the ten thousand dollars (\$10,000) from the final payment, or the full final payment if less than ten thousand dollars (\$10,000).

1.7 CONTRACTOR'S CERTIFICATION OF SMALL BUSINESS (SB) PARTICIPATION

- A. If final payment has been made to Small Business, upon Completion of the Work, submit the two-page certification, Forms 01 77 00.01 and 01 77 00.02 "Contractor's Certification of Small Business Participation".
- B. If retention has been withheld, and final payment to Small Business subcontractors will not be made until the Contractor has received final payment from the State, Contractor shall:
1. Upon completion of the Work submit the two-page certification, Forms 01 77 00.01 and 01 77 00.02 "Contractor's Certification of Small Business Participation"; and mark the box entitled "PRELIMINARY REPORT" on Form 01 77 00.02.

CLOSEOUT PROCEDURES

2. Within 30 days of receipt of final payment submit an updated two-page certification, Forms 01 77 00.01 and 01 77.00.02 "Contractor's Certification of Small Business Participation" and mark the box entitled "FINAL REPORT" on Form 01 77 00.02. The FINAL REPORT shall be mailed to: DGS, Real Estate Services Division, Project Management & Development Branch, 707 Third Street 4th Floor, West Sacramento, CA 95605; or sent as a scanned Adobe PDF or similar e-mail attachment to State's Representative.

- C. When completing the Certification, include all Small Businesses even if the firms were not listed at bid time when completing percentage calculations. Provide comments if Small Business utilization was different than that approved in original Agreement. The second page of the Certification may be copied as needed to list all firms.

1.8 SUBMITTAL OF PROJECT WARRANTIES

- A. Standard Guarantee: Refer to Document 00 72 00 "General Conditions of the Contract for Construction", Article 3.5. Submittal is not required for a standard one year guarantee for Work on this project.
- B. Additional Guaranties/Warranties: Provide additional guaranties/warranties, in excess of one year, where specifically required by individual Specifications Sections. Additional guaranties/warranties will commence on the date of Completion of the Work as established by the State's Representative.
- C. Time of Submittal: Submit written warranties on request of State for designated portions of the Work where warranties are indicated to commence on dates other than date of Completion, or when delay in submittal of warranties might limit State's rights under warranty.
 1. For equipment put into use with State's permission during construction, submit warranties within 10 days after first operation.
- D. Organize warranty documents into an orderly sequence based on the table of contents of Project Manual.
- E. Provide duplicate, notarized copies of warranties. Execute Contractor's submittals and assemble documents executed by subcontractors, suppliers, and manufacturers.
- F. Warranties:
 1. Bind warranties and bonds in heavy-duty, three-ring, vinyl-covered, loose-leaf binders, thickness as necessary to accommodate contents, and sized to receive 8-1/2-by-11-inch paper.
 2. Provide heavy paper dividers with plastic-covered tabs for each separate warranty. Mark tab to identify the product or installation. Provide a typed description of the product or installation, including the name of the product and the name, address, and telephone number of Installer.
 3. Identify each binder on the front and spine with the typed or printed title "WARRANTIES," Project name and number, and name of Contractor.
- G. Warranty Electronic File: Provide warranties and bonds in PDF format. Assemble complete warranty and bond submittal package into a single electronic PDF file with bookmarks enabling navigation to each item. Provide bookmarked table of contents at beginning of document.
- H. Provide additional copies of each warranty to include in operation and maintenance manuals.

CLOSEOUT PROCEDURES

1.9 RECORD DRAWINGS

- A. General: Use one set of State furnished paper copies of the Contract Drawings as record prints.
- B. Record Prints: Maintain one set of marked-up paper copies of the Contract Drawings and Shop Drawings, incorporating new and revised drawings as modifications are issued.
 - 1. Preparation: Mark record prints to show the actual installation, where installation varies from that shown originally. Require individual or entity who obtained record data, whether individual or entity is Installer, subcontractor, or similar entity, to provide information for preparation of corresponding marked-up record prints.
 - a. Give particular attention to information on concealed elements that would be difficult to identify or measure and record later.
 - b. Accurately record information in an acceptable drawing technique.
 - c. Information entered on record prints shall be neat, legible, and emphasized by drawing "revision clouds" around changed items.
 - d. Symbols and designations used in preparing record prints shall match those used in Contract Drawings.
 - e. Record data as soon as possible after obtaining it.
 - f. Record and check the markup before enclosing concealed installations.
 - g. Cross-reference record prints to corresponding photographic documentation.
 - 2. Content: Types of items requiring marking include, but are not limited to, the following:
 - a. Dimensional changes to Drawings.
 - b. Revisions to details shown on Drawings.
 - c. Depths of foundations.
 - d. Locations and depths of underground utilities.
 - e. Revisions to routing of piping and conduits.
 - f. Revisions to electrical circuitry.
 - g. Actual equipment locations.
 - h. Duct size and routing.
 - i. Locations of concealed internal utilities.
 - j. Special measurements.
 - k. Changes made by Change Order.
 - l. Changes made following Additional Detailed Instructions.
 - m. Details not on the original Contract Drawings.
 - n. Field records for variable and concealed conditions.
 - o. Record information on the Work that is shown only schematically.
 - p. Miscellaneous records required by other Specification Sections.
 - 3. Mark the Contract Drawings and Shop Drawings completely and accurately. Use personnel proficient at recording graphic information in production of marked-up record prints.
 - 4. Mark record prints with erasable, red-colored pencil. Use other colors to distinguish between changes for different categories of the Work at same location.
 - 5. Mark important additional information that was either shown schematically or omitted from original Drawings.
 - 6. Note Change Order, Request for Information and Additional Detailed Instructions numbers, and similar identification, where applicable.

1.10 MAINTENANCE OF RECORD DRAWINGS

- A. Maintenance of Record Drawings: Store Record Drawings in the field office apart from the Contract Documents used for construction. Do not use Project Record Drawings for construction purposes. Maintain Record Drawings in good order and in a clean, dry, legible condition, protected from deterioration and loss. Provide access to Project Record Drawings for State reference during normal working hours.
- B. Monthly Applications for Payments will not be processed without review and approval of Project Record Drawings by the State.
- C. Final Inspection will not be scheduled until Project Record Drawings are submitted to the State.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Cleaning Agents: Use cleaning materials and agents recommended by manufacturer or fabricator of the surface to be cleaned. Do not use cleaning agents that are potentially hazardous to health or property or that might damage finished surfaces.
 - 1. Use cleaning products that comply with the California Code of Regulations maximum allowable VOC levels.

PART 3 - EXECUTION

3.1 FINAL CLEANING

- A. General: Perform final cleaning. Conduct cleaning and waste-removal operations to comply with local laws and ordinances and Federal and local environmental and antipollution regulations.
- B. Cleaning: Employ experienced workers or professional cleaners for final cleaning. Clean each surface or unit to condition expected in an average commercial building cleaning and maintenance program. Comply with manufacturer's written instructions.
 - 1. Complete the following cleaning operations before requesting inspection for certification of Completion for entire Project or for a designated portion of Project:
 - a. Clean Project site of rubbish, waste material, litter, and other foreign substances.
 - b. Remove tools, construction equipment, machinery, and surplus material from Project site.
- C. Deficient cleaning operations, as determined by the State, shall be immediately corrected as directed.
- D. Construction Waste Disposal: Comply with waste-disposal requirements.

3.2 REPAIR OF THE WORK

- A. Complete repair and restoration operations required by Section 01 73 00 "Execution" before requesting inspection for determination of Completion.

CLOSEOUT PROCEDURES

3.3 ATTACHMENTS

- A. Certification of Disabled Veteran Business Enterprise Participation: Form STD 817 “Prime Contractor’s Certification – DVBE Subcontractor Report”
- B. Certification of Small Business Participation: 2 pages.
 - 1. Form 01 77 00.01: Contractor’s Certification of SB Participation (the first page).
 - 2. Form 01 77 00.02: Contractor’s Certification of SB Participation (the second page).

END OF SECTION

STATE DEPARTMENT AND CONTRACT INFORMATION							
State Department Information		Contract Information		Prime Contractor Information:		FOR STATE USE ONLY	
State Department Name:		Contract #:		Name:		Date Received:	
State Department Address:		FISCAL Supplier ID#:		Address:			
Contract Manager Name:		Contract Execution Date:		Phone #:			
Contract Manager Phone #:		Date Work Completed:		Email:			
Contract Manager Email Address:		Contract Award Amount:		Date Last Payment Received:			
				Contract Received Amount:			
SECTION 3 List all Disabled Veteran Business Enterprise firms involved with this contract.							
(A) DVBE Subcontractor(s) Name	(B) DVBE Subcontractor(s) Address	(C) DVBE Certification ID Number	(D) Total Contract Commitment Percentage to DVBE	(E) Total Contract Commitment Amount to DVBE	(F) Total Payment Amount to DVBE	(G) Difference in Amount Paid to DVBE (F - E)	(H) Percentage Paid to DVBE (F/Contract Received Amount)
Number of DVBE Subcontractors			Grand Total	\$ 0.00	\$ 0.00	\$ 0.00	0.00%
1.			0.00%			0.00	0.00%
2.			0.00%			0.00	0.00%
3.			0.00%			0.00	0.00%
4.			0.00%			0.00	0.00%
5.			0.00%			0.00	0.00%
6.			0.00%			0.00	0.00%
7.			0.00%			0.00	0.00%
8.			0.00%			0.00	0.00%
9.			0.00%			0.00	0.00%
10.			0.00%			0.00	0.00%
11.			0.00%			0.00	0.00%
12.			0.00%			0.00	0.00%
13.			0.00%			0.00	0.00%
(I) Comments/Explanations							
Use next page for additional lines							
I certify under penalty of perjury under the laws of the State of California that all information submitted is true and correct.							
Prime Contractor	Print Name:					Date:	
	Title:						
	Signature:						
Return upon completion of contract.							
Americans with Disabilities (ADA) Notice: Persons with disabilities requiring reasonable modifications should contact the OSDS Report Coordinator at OSDSReports@dgs.ca.gov							

STATE DEPARTMENT AND CONTRACT INFORMATION							
State Department Information		Contract Information		Prime Contractor Information		FOR STATE USE ONLY	
State Department Name:		Contract #:		Name:		Date Received:	
State Department Address:		FISCAL Supplier ID#:		Address :			
Contract Manager Name:		Contract Execution Date:		Phone #:			
Contract Manager Phone #:		Date Work Completed:		Email:			
Contract Manager Email Address:		Contract Award Amount:		Date Last Payment Received:			
				Contract Received Amount:			
List all Disabled Veteran Business Enterprise firms involved with this contract.							
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
DVBE Subcontractor(s) Name	DVBE Subcontractor(s) Address	DVBE Certification ID Number	Total Contract Commitment Percentage to DVBE	Total Contract Commitment Amount to DVBE	Total Payment Amount to DVBE	Difference in Amount Paid to DVBE (F - E)	Percentage Paid to DVBE (F/Contract Received Amount)
Number of DVBE Subcontractors			Total	\$ 0.00	\$ 0.00	\$ 0.00	0.00%
14.			0.00%			0.00	0.00%
15.			0.00%			0.00	0.00%
16.			0.00%			0.00	0.00%
17.			0.00%			0.00	0.00%
18.			0.00%			0.00	0.00%
19.			0.00%			0.00	0.00%
20.			0.00%			0.00	0.00%
21.			0.00%			0.00	0.00%
22.			0.00%			0.00	0.00%
23.			0.00%			0.00	0.00%
24.			0.00%			0.00	0.00%
25.			0.00%			0.00	0.00%
26.			0.00%			0.00	0.00%
27.			0.00%			0.00	0.00%
28.			0.00%			0.00	0.00%
29.			0.00%			0.00	0.00%
30.			0.00%			0.00	0.00%
31.			0.00%			0.00	0.00%
32.			0.00%			0.00	0.00%
33.			0.00%			0.00	0.00%
34.			0.00%			0.00	0.00%
35.			0.00%			0.00	0.00%
36.			0.00%			0.00	0.00%
Attach copies of this page for additional lines							
I certify under penalty of perjury under the laws of the State of California that all information submitted is true and correct.							
Americans with Disabilities (ADA) Notice: Persons with disabilities requiring reasonable modifications should contact the OSDS Report Coordinator at OSDSReports@dgs.ca.gov							

Form Completion Instructions

GENERAL INFORMATION: Military and Veteran Code (MVC) 999.5(d), 999.7 and Government Code (GC) 14841, and California Code of Regulations (CCR) 1896.78(e) requires all Prime Contractors that committed to have a Disabled Veteran Business Enterprise (DVBE) perform an element of work for a contract to report DVBE subcontractor participation information and certify to the state that all DVBE subcontracting payments were made. Departments are required to withhold \$10,000 from the final payment, or the full payment if less than \$10,000, on contracts until the Prime Contractor complies with the certification requirements by submitting this form.

If prime contractors do not comply with the requirements after given notice to cure by the state departments, the withheld amount will be permanently deducted.

All contracted work must be completed before submission of invoice(s) and this certification form.

Prime Contractors are required to maintain records supporting the information submitted on this form and that all payments to DVBE subcontractor(s) were made. Upon request, proof of payment must be provided (MVC 999.5(d)).

INCLUDE

- **ONLY ONE contract per Report**
- **All DVBEs that performed an element of work for this contract regardless of tier**

State Department Information:

State Department Name: Enter the State Department name

State Department Address: Enter the State Department address

Contract Manager Name: Enter the Contract Manager name

Contract Manager Phone Number: Enter the Contract Manager phone #

Contract Manager Email Address: Enter the Contract Manager email address

Contract Information

Contract Number: Enter the Contract Number

Contractor's FI\$Cal Supplier ID Number: Enter your FI\$Cal supplier ID number

Contract Execution Date: Enter the date contract was signed

Date Work Completed: Enter the date the work was completed on the contract

Contract Award Amount: Enter the total dollar amount awarded for this contract including all financial amendments

State of California
 Department of General Services Procurement Division
 Prime Contractor's Certification - DVBE Subcontracting
 Report STD 817, Formerly DGS PD 810P
 (Rev. 10/2021)

Form Completion Instructions

Prime Contractor Information:

Prime Contractor Name: Enter your name as shown on the contract

Prime Contractor Address: Enter your address

Phone Number: Enter your number (with area code)

Email Address: Enter your email address

Date Last Payment Received: Enter the date the last payment for work performed was received

Contract Received Amount: Enter the dollar amount of the last payment received

For State Use Only

Date STD 817 Received: Enter date the Contract Manager received the STD 817 from the Prime Contractor

TABLE INSTRUCTIONS

A) DVBE Subcontractor(s) Name: Enter the name of all DVBEs that are listed to perform an element of work or supplies for this contract and any formal approved substitution(s). (Use additional lines if the name does not fit on a single line) Use page two for additional lines.

B) DVBE Subcontractor(s) Address: Enter the address of each DVBE (Use page 2 for additional lines if address does not fit on a single line)

C) DVBE Certification ID Number: Enter each DVBE's certification number

D) Total Contract Commitment Percentage to DVBE: Enter the total percentage of contracted dollars to each DVBE at the time of award

E) Total Contract Commitment Amount to DVBE: Enter the entire amount contracted to each DVBE at the time of award

F) Total Payment Amount to DVBE: Enter the total amount paid to all DVBEs that performed an element of work or were suppliers for this contract

Form Completion Instructions

Note: Complete and accurate certifications are due upon completion of contract.

G) Difference in Amount Paid to DVBE: The form will compute the difference of DVBE dollars contracted compared to dollars paid

H) Percentage Paid to DVBE: The form will compute the percentage paid to DVBEs using the Contract Received Amount entered under State and Contract Information

Instructions I

I) Comments/Explanations: Enter any relevant comments and explanations for any differences between the DVBE amounts or percentages committed and paid. Reference the line number if comments and explanations are used.

SIGNATURE BLOCK

Prime Contractor's Signature: Enter your printed name, title, sign with an electronic signature or a wet signature, and date

CONTRACTOR'S CERTIFICATION OF SMALL BUSINESS PARTICIPATION

TO: Real Estate Services Division (Construction Services Area Office Address)	Date:
	Project Number:
	Contract Number:

FROM:

PROJECT
TITLE:

THIS IS TO CERTIFY THAT I,

(Print Name)

AS AN AUTHORIZED OFFICIAL OF

(Firm or Corporation)

WORKING IN THE CAPACITY OF

(Title)

HAVE BEEN PROPERLY AUTHORIZED BY SAID FIRM OR CORPORATION TO SIGN THE
FOLLOWING STATEMENT PERTAINING TO SUBJECT CONTRACT.

Pursuant to Government Code, Section 14841,

I, the undersigned, hereby certify that to the best of my knowledge, the Small Business participation
information listed on the attached report for the above contract is complete and correct.

SIGNED:

DATE:

FORM 01 77 00.02 CONTRACTOR'S CERTIFICATION OF SMALL BUSINESS PARTICIPATION

State of California · Department of General Services

☐ PRELIMINARY REPORT

CONTRACTOR'S CERTIFICATION OF SMALL BUSINESS (SB) PARTICIPATION

☐ FINAL REPORT

CONTRACT NUMBER		PROJECT NUMBER		CONTRACT COMPLETION DATE		CONTRACT ACCEPTANCE DATE	
PRIME CONTRACTOR			ORIGINAL CONTRACT AMOUNT			FINAL CONTRACT AMOUNT	
DESCRIPTION OF WORK PERFORMED AND MATERIALS PROVIDED	SB BUSINESS NAME AND ADDRESS	SB CERT. NO.	SB CONTRACT PAYMENTS				
			PAYMENT AMOUNT	DATE WORK COMPLETED	DATE OF FINAL PAYMENT	COMMENTS	
TOTAL \$							

ORIGINAL SMALL BUSINESS COMMITMENT: _____%

ACTUAL SMALL BUSINESS ACHIEVED: _____%

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	00 01 05	Certifications Page 1 only
	00 01 10	Table of Contents 1 through 4
	00 01 15	List of Drawings 1 only

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Document	00 11 00	Invitation for Bids 1 through 3
	00 21 00	Instructions to Bidders 1 through 8
Appendix	00 21 00.01	Request for Bidding Interpretation 1 only
Document	00 22 00	Supplementary Instructions to Bidders 1 only
	00 22 10	DVBE Participation Program Requirements 1 through 3
	00 41 00	Bid Form (Sample) 1 through 9
	00 43 13	Bidder's Bond 1 only
	00 43 16	Certified Small Business Subcontractor(s) Summary (Sample) 1 through 2
	00 45 46	Payee Data Record 1 through 2

CONTRACTING REQUIREMENTS

Document	00 52 00	Agreement (Sample) 1 only
	00 61 13	Performance Bond (Sample) 1 only
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	00 63 63	Construction Contract Change Order (Sample) 1 only
	00 72 00	General Conditions of the Contract for Construction 1 through 31
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SPECIFICATIONS GROUP**GENERAL REQUIREMENTS SUBGROUP****DIVISION 01 - GENERAL REQUIREMENTS**

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	01 25 00	Substitution Procedures 1 through 2
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	01 32 00	Construction Progress Documentation 1 through 4

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DIVISION 03 – CONCRETE (NOT USED)

DIVISION 04 – MASONRY (NOT USED)

DIVISION 05 – METALS (NOT USED)

DIVISION 06 – WOOD, PLASTICS, AND COMPOSITES (NOT USED)

DIVISION 07 – THERMAL AND MOISTURE PROTECTION (NOT USED)

DIVISION 08 – OPENINGS (NOT USED)

DIVISION 09 – FINISHES (NOT USED)

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SITE AND INFRASTRUCTURE SUBGROUP

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DIVISION 33 – UTILITIES (NOT USED)

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DIVISION 36 – RESERVED (NOT USED)

DIVISION 37 – RESERVED (NOT USED)

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BOOK II

APPENDICES

Limited Asbestos and Lead-Containing Hazardous Materials Survey Report, Oct. 16, 2024 – 345 W. Ash Street
Limited Asbestos and Lead-Containing Hazardous Materials Survey Report, Oct. 16, 2024 – 1301 State Street
Hazardous Material Investigation, Nov. 7, 2006 – 1301 State Street
Structural Assessment Related to Planned Demolition, July 25, 2023 - 1301 State Street

BOOK III

APPENDICES

Phase 1 Environmental Site Assessment, May 22, 2020 – 345 W. Ash Street and 1301 State Street
Phase 2 Investigation Report, May 3, 2022 – 345 W. Ash Street and 1301 State Street

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END OF DOCUMENT

SECTION 02 08 00 .1

HAZARDOUS MATERIALS ABATEMENT SPECIFICATIONS

FORMER STATE OF CALIFORNIA GARAGE

345 WEST ASH STREET

SAN DIEGO, CALIFORNIA 92101

OCTOBER 25, 2024

SECTION 02 08 00.1 ASBESTOS

ASBESTOS ABATEMENT

PART 1 – GENERAL

1.1.0 STIPULATIONS

- A The procedures specified herein are guidelines for minimum performance. The Contractor is responsible for their own methods of operations and conformance to regulatory codes, rules, and guidelines. The Contractor is required to obtain all permits/licenses and approvals to perform the work, including any rights to use patented systems.

1.1.1 SCOPE OF WORK

- A Work included. The licensed Contractor shall furnish all labor, employee training, materials, services, permits and agreements, insurance specifically covering the handling and transportation of Asbestos-Containing Material, Asbestos-Containing Construction Material and Asbestos-Containing Waste Material, and equipment which is specified, shown, or reasonably implied for abatement or disturbance of the materials included for abatement and all other work in accordance with the latest regulations from the U.S. Environmental Protection Agency (EPA), the Occupational Safety and Health Administration (OSHA), the State of California Division of Occupational Safety and Health (DOSH), San Diego County Air Pollution Control District (APCD) and any other applicable federal, state and local government regulations.
- B The scope of work for this project includes the removal and disposal of the identified asbestos-containing materials (ACMs) and asbestos-containing construction materials (ACCMs) as listed in Table 1-1 and 1-2. These materials were identified in the SCS Engineers' Asbestos and Lead-Based Paint Survey, Project No. 01222193-02, dated February 10, 2023.
- C Contractor shall submit an Abatement Work Plan which describes specifically how the abatement work is to be completed. At a minimum the Abatement Work Plan shall address work area preparation, work practices, decontamination unit location, respiratory protection and disposal. Approval of the Work Plan must be obtained through the Owner prior to the start of work. Procedures outlined in the Abatement Work Plan must be followed throughout the abatement phase. Any changes in the Abatement Work Plan must obtain prior approval from the Owner.

Table 1-1: Identified ACMs Titan Environmental Solutions September 12, 2024										
HA No.	Sample No.	Sample Location	Material Description	Class.	Material Location(s)*	Friable Non-Friable	Condition (G, D, SD)	Estimated Quantity*	Asbestos Analytical Results	SDCAPCD NESHAP Cat.
02	0912-02-01	Paradeet End	Black Paradeet all Roo Masti	Mis	Paradeet all Perimeter o Roo	N	G	2100 S	Crysotile	ACM
	0912-02-02	Paradeet N End								
	0912-02-06	Paradeet E End								
08	0912-08-21	Paradeet Ca End	Light Gray Light Weight Concrete	Mis	Paradeet Ca on Roo	N	G	100 S	Crysotile	ACM
	0912-08-22	Paradeet Ca N End								
	0912-08-26	Paradeet Ca E End								

Legend

A = Homogenous Material

N = North, E = East, S = West, S = South, S = Square Feet, L = Linear Feet, ND = None Detected

Classification: Class = Miscellaneous, Sur = Surfacing, TSI = Thermal System Insulation

Condition: G = Good, D = Damaged, SD = Significantly Damaged

Categories: Cat

• CalOSHA: ACCM = Asbestos Containing Construction Materials, ACM = Asbestos Containing Materials - Class I, Class II, Class III, Class IV

• Presumed Asbestos Containing Material (PACM) = means thermal system insulation and surfacing material found in buildings constructed no later than 1980

• NESHAP: Cat I = Category I Non-friable ACM, Cat II = Category II Non-friable ACM, RACM = Regulated Asbestos Containing Materials

The locations and quantities provided are estimates based solely on accessible materials in the survey area. There may be additional locations and quantities of asbestos-containing materials present at the Subject Property.

In accordance with 40 CFR Section 61.141 and 40 EPA Asbestos Abatement Control Number 112, if the amount by visual estimation appears to be less than 10 percent, the owner or operator may assume the amount to be greater than 1 percent and treat the materials as asbestos-containing material, or require verification of the amount by point counting. If a result obtained by point count is different from a result obtained by visual estimation, the point count result will be used. Please note the Certified Asbestos Consultant will assume any material that is analyzed via PLM and not verified by point count as an Asbestos Containing Material (ACM).

The third-party laboratory will discard all submitted samples after thirty (30) calendar days following receipt of the samples. Any additional analysis must be requested within thirty (30) days by the Client.

Table 1-2: Identified ACMs
SCS Engineers Memorandum Report
February 10, 2023

Sample Identifier	Material	Material Location	Friable/ Non-Friable	Condition (G, F, P)	Quantity*	Asbestos Analytical Results
1-1AB 1-2AB 1-3AB 1-4AB 1-5AB	A Dry Wall B Joint Compound C Composite	S all in Room 1 E all in Room 1 E all in Room 3 E all in Room 4 all in Room 5		Fair	1,200 S	ND Dry Wall 3 Crysotile Joint Compound 1 Crysotile Dry Wall Joint Compound Composite
2-1AB 2-2AB 2-3AB	A 9"x9" Vinyl Composition Tile B Black Masti	South Side of floor in Room 1 East Side of floor in Room 2 North Side of floor in Room 3	N	Poor	100 S	Crysotile Composition Tile 2 Crysotile Masti
3-1AB 3-2AB 3-3AB	A 12"x12" Vinyl Composition Tile B Black Masti	Side of floor in Restroom Center of floor in Restroom Center of floor in Restroom	N	Good	200 S	Crysotile Composition Tile 2 Crysotile Masti
10-1 10-2 10-3	Penetration Masti	SE Side of Roof SW Side of Roof NW Side of Roof	N	Good	10 S	10 Crysotile
11-1AB 11-2AB 11-3AB	A Roofing Material B felt	Side of Roof Center of Roof E Side of Roof	N	Good	1,000 S	ND Roofing Material Crysotile felt
12-1 12-2 12-3	Skylight to Roof Masti	Room to Roof 3 Center of Roof Room to Roof 1	N	Good	12 S	10 Crysotile

Table 1-2: Identified ACMs
SCS Engineers Memorandum Report
February 10, 2023

Sample Identifier	Material	Material Location	Friable/ Non-Friable	Condition (G, F, P)	Quantity*	Asbestos Analytical Results

Legend

A = Homogenous Material
 N = North, E = East, S = South, SE = Southeast, L = Linear Feet, ND = None Detected
 Classification = Class = Miscellaneous, Sur = Surfacing, TSI = Thermal System Insulation
 Condition = G = Good, D = Damaged, SD = Significantly Damaged

Categories

- CalOSHA ACCM = Asbestos Containing Construction Materials, ACM = Asbestos Containing Materials - Class I, Class II, Class III, Class IV
- Presumed Asbestos Containing Material (PACM) means thermal system insulation and surfacing material found in buildings constructed no later than 1980
- NESAP Category I = Category I Non-friable ACM, Cat II = Category II Non-friable ACM, RACM = Regulated Asbestos Containing Materials

The locations and quantities provided are estimates based solely on accessible materials within the survey area. There may be additional locations and quantities of asbestos-containing materials present at the Subject Property.

In accordance with 40 CFR Section 61.141 and 40 CFR Part 61.142, if the amount by visual estimation appears to be less than 10 percent, the owner or operator may assume the amount to be greater than 1 percent and treat the materials as asbestos-containing material, or require verification of the amount by point counting. If a result obtained by point count is different from a result obtained by visual estimation, the point count result will be used. Please note the Certified Asbestos Consultant will assume any material that is analyzed via PLM and not verified by point count as an Asbestos Containing Material (ACM).

The third-party laboratory will discard all submitted samples after thirty (30) calendar days following receipt of the samples. Any additional analysis must be requested within thirty (30) days by the Client.

D Contractor is required to verify the scope of work prior to commencing work, including quantities of materials to be removed, and to determine the degree of difficulty in removing the identified materials.

E Applicable Publications The publications listed below form a part of these Specifications to the extent referenced. The publications are referred to in the text by the basic designation only.

1 Code of Federal Regulations	CFR Publications
29 CFR 1910.1001	Asbestos
29 CFR 1926.1101	Asbestos
29 CFR 1910.1200	Label Communication
29 CFR 1910.1020	Access to Employee Exposure and Medical Records
29 CFR 1910.132	General Requirements - Personal Protective Equipment
29 CFR 1910.133	Eye and Face Protection
29 CFR 1910.134	Respiratory Protection
29 CFR 1910.146	Specifications for Accident Prevention, Signs and Tags
29 CFR 1910.147	Confined Space
29 CFR 1910.147	Lockout/Tagout
40 CFR 61, Subpart A	General Conditions
40 CFR 61, Subpart M	National Emission Standards for Asbestos

- 10 CFR 61.12 Standard for Waste Disposal for Manufacturing, Demolition, Renovation, Stripping and Fabrication Operations
- 2 American National Standard Institute/American Industrial Hygiene Association (ANSI/AIHA) Publications
92-2006 Fundamentals Governing the Design and Operation of Local Exhaust Systems
- 3 American National Standard Institute/American Society of Safety Engineers (ANSI/ASSE) Publications
88-2-201 Practices for Respiratory Protection
- 4 National Fire Protection Association (NFPA)
Standard 90A Installation of Air Conditioning and Ventilation Systems, 201 Edition
- 5 U.S. Environmental Protection Agency (EPA)
Publication No.
600-8-02 Guidance for Controlling Asbestos-Containing Materials in Buildings, June, 198
- 6 American Society for Testing and Materials (ASTM) Publications
E 89-82 Safety and Health Requirements Relating to Occupational Exposures to Asbestos
P 189 Specifications for Encasulants for friable Asbestos-Containing Materials
- 7 National Institute of Occupational Safety and Health (NIOSH) Publications
Manual of Analytical Methods, 2nd Edition, Volume 1
Method 700 Asbestos and Other Fibers by PCM
- 8 Underwriters Laboratories, Inc. (UL) Publications
86-77 (R1982) Test Performance of High Efficiency Particulate Air Filter Units
- 9 California Code of Regulations (CCR) Publications
8 CCR 129 Construction Safety Orders-Asbestos
8 CCR 208 General Industry Safety Orders-Asbestos
8 CCR 100 Respiratory Protective Equipment
- 10 San Diego County Air Pollution Control District (APCD)
Rule 1206 -Asbestos – Demolition and Renovation
- 11 Other Local or Regional Regulations that apply to Asbestos-Related Work

Please note Contractor is responsible for ascertaining the extent to which these regulations will affect removal operations and to comply therewith.

1.1.2 DEFINITIONS

- A** **O**wner State of California
- B** **A**batement Procedures to control fiber release from Asbestos-Containing Materials (ACM) Asbestos Containing Construction Materials (ACCM) Includes removal, encapsulation, and enclosure
- C** **A**dequately wet means sufficiently mixed with a liquid or penetrated by a liquid to prevent the release of particulate matter visible emissions are observed coming from RACM, ACM, ACCM, ACM, then the RACM, ACM, ACCM, or ACM has not been adequately wet
- D** **A**ggressive Clearance final clearance air monitoring of a regulated asbestos work areas utilizes leaf blowers, fans, and similar tools to “aggressively” disturb and entrain any settled residual asbestos fibers for the purpose of capturing them during sampling
- E** **A**ggressive Method means removal or disturbance of building material by sanding, abrading, grinding or other method that breaks, crumbles, or disintegrates into ACM
- A**ir Lock A system for permitting ingress and egress with minimum air movement between a contaminated area and an uncontaminated area (See Decontamination Enclosure System Plan in the Drawing section of this Project Manual)
- G** **A**ir Monitoring The process of measuring the fiber content of a specified volume of air in a stated period of time
- A**ir Sampling Professional The professional contracted or employed to supervise air monitoring and analysis schemes This individual is also responsible for recognition of technical deficiencies in worker protection equipment and procedures during both planning and on-site phases of an Abatement Project Acceptable Air Sampling Professionals include Industrial Hygienists, Environmental Engineers and Environmental Scientists with equivalent experience in Asbestos air monitoring and worker protection
- I** **A**mended water water to which a surfactant has been added
- A**rea Monitoring Sampling of airborne fiber concentrations within the Asbestos Work Area and outside the Asbestos Work Area are representative of the airborne concentrations of Asbestos fibers may reach the breathing zone
- K** **A**sbestos Means the asbestiform or silicon naturally occurring hydrated silicate minerals, these include chrysotile, the asbestiform member of the serpentine group, riebeckite, tremolite, the asbestiform variety of cummingtonite-grunerite, anthophyllite asbestos, actinolite asbestos, tremolite asbestos, and any of these minerals that have been chemically treated or altered
- L** **A**sbestos (CCR definitions) Means fibrous forms of various hydrated minerals including Chrysotile, fibrous serpentine, Crocidolite, fibrous Riebeckite, Amosite, fibrous Tremolite, fibrous Actinolite, and fibrous Anthophyllite
- M** **A**sbestos-Containing Material (ACM) Material composed of asbestos of any type in an amount greater than one percent by weight, either alone or mixed with other fibrous or non-fibrous materials

- N** Asbestos-Containing Construction Material (ACCM) According to Title 8, Section 1029, asbestos-containing construction material means any manufactured construction material that contains more than 0.1% asbestos by weight.
- O** Asbestos-Containing Waste Material (ACM) Means any waste that contains or is contaminated with friable asbestos waste, RACM generated by a facility. ACM includes, but is not limited to, RACM stripped or removed from a structure, facility, or component, any materials, soils, and/or debris contaminated with RACM including equipment and clothing, RACM waste and filters from control devices (Pollution Control Devices), particulate asbestos material, RACM slurries bags, packages and containers that previously contained RACM.
- P** ACM Disposal Site Means any location where ACM has been abandoned, buried, covered, deposited, or stored. This term includes locations with ACM where the original source and date of generation cannot be determined.
- PR** Asbestos-Related Work means any activity in which disturbing ACCM may release asbestos fibers into the air.
- R** Assumed ACM Means materials assumed to contain more than one percent (1%) asbestos.
- S** Asbestos Fibers Asbestos fibers having an aspect ratio of at least 3:1 and 5 micrometers in length when air samples analyzed using Phase Contrast Microscopy (PCM).
- T** Authorized Visitor The Owner's Project Team members, the Owner's Representative, and any representative of a regulatory or other agency having jurisdiction over the Project.
- CI** Category I Non-Friable ACM Means asbestos-containing packings, gaskets, resilient floor covering, mastics, and asphalt roofing products containing more than 1 percent (1%) asbestos.
- CV** Category II Non-Friable ACM Means any material containing more than 1 percent (1%) asbestos, excluding Category I Non-Friable ACM, that when dry, and in its present form, cannot be crumbled, pulverized, or reduced to powder by hand pressure. For the purposes of this Specification, these products include transite board, pipe and asbestos cement products, plaster, stucco, and paint – unless removed by aggressive or mechanical methods.
- CR** Clean Room An uncontaminated area or room which is a part of the Worker Decontamination Enclosure with provisions for storage of workers' clothes and protective equipment.
- CL** Clear Leak-Tight Packaging Means a clear translucent bag that allows for visual confirmation that the RACM, ACM, ACCM, ACM inside a bag is kept adequately wet.
- Y** Competent Person In addition to the definition in CCR 1926.32 (b), one who is capable of identifying existing asbestos hazards in the workplace and selecting the appropriate control strategy for asbestos exposure, who has the authority to take prompt corrective measure to eliminate them, as specified in CCR 1926.32 (b). In addition, for Class I and Class II work, one who is specifically trained in a training course which meets the criteria of EPA's Model Accreditation Plan (40 CFR § 763) for supervisor, or its equivalent and, for Class III and Class IV work, one who is

trained in a manner consistent with EPA requirements for training of local education agency maintenance and custodial staff as set forth at 40 CFR § 763.92 (a)(2) Contained Work Area A Work Area that has been Isolated, Plasticed, and Equipped with a Decontamination Enclosure System

- CC Critical Barrier One or more layers of plastic sealed over an opening into a Work area or any other similarly placed physical barrier sufficient to prevent airborne asbestos in a Work area from migrating to an adjacent area
- AA Curtained Doorway A device to allow ingress or egress from one area to another while permitting minimal air movement between the areas, typically constructed by placing three overlapping sheets of plastic over an existing or temporarily framed doorway, securing each along the top of the doorway, and securing the vertical edge of the outer two sheets along the opposite vertical side of the doorway (see detail on Decontamination Enclosure System Plan in the Drafting section of this Project Manual)
- BB Decontamination Enclosure System A series of connected rooms, with Air Locks or Curtained Doorways between any two adjacent rooms, for the decontamination of workers and materials and equipment A Decontamination Enclosure System always contains at least one Air Lock to the Work Area
- CC Differential Air Pressure Equipment: A portable local exhaust fan or "unit" equipped with EPA filtration and capable of maintaining a constant, negative air pressure differential within the regulated Work area by providing a low velocity air flow into Contaminate areas from adjacent uncontaminated areas and exhausting filtered air outside the Work area
- DD Disturbance Means activities that disrupt the matrix of ACM or PACM, crumble or pulverize ACM or PACM, or generate visible debris from ACM or PACM Disturbance includes cutting away small amounts of ACM and PACM, no greater than the amount that can be contained in one standard sized glove bag or waste bag in order to assess a building component In no event shall the amount of ACM or PACM so disturbed exceed that which can be contained in one glove bag or waste bag which shall not exceed 60 inches in length and width
- EE Encapsulant Sealant A liquid material which can be applied to Asbestos-Containing Material, and which controls the possible release of Asbestos fibers from the material either by creating a membrane over the surface bridging encapsulant or by penetrating into the material and binding its components together penetrating encapsulant
- En Encapsulation All herein-specified procedures necessary to apply an encapsulant to Asbestos-Containing building materials to control the possible release of Asbestos fibers into the ambient air
- GG Enclosure All herein-specified procedures necessary to enclose completely Asbestos-Containing Material behind airtight, impermeable, permanent barriers
- EE Exposure Limit An exposure of airborne concentrations of Asbestos fibers of one fiber per cubic centimeter of air which has averaged over a sampling period of thirty (30) minutes
- II Equipment Decontamination Enclosure That portion of a Decontamination Enclosure System designed for controlled transfer of materials, waste containers and equipment, typically consisting of a Passroom and a Holding Area

- Equipment Room□ A contaminated area or room □□□□ is part of the Worker Decontamination Enclosure □□□□ provisions for storage of contaminated clothing and equipment□
- KK□ Friable Asbestos Material □□□□ CFR 61, Subpart M Definition□ Material that contains more than one percent □□□□ Asbestos by weight and that can be broken, crumbled, pulverized, or reduced to powder by hand pressure when dry□
- LL□ Fixed Object□ A unit of equipment or furniture or other building component □□□□ cannot be detached from the building or can only be detached by destructive methods resulting in irreparable damage to the item□
- MM□ Glovebag Method□ A method □□□□ limited applications for removing small amounts of friable Asbestos-Containing material from heating ventilation and air-conditioning ducts, short piping runs, valves, joints, elbows, and other nonplanar surfaces in an □□□□ isolated non-contained□□ work Area□ The glovebag typically constructed of □□□□ 6 mil transparent plastic□□□□ as too in□□□□-roaching long sleeve rubber gloves, one in□□□□-roaching water □□□□ and sleeve, an internal tool □□□□, and an attached, labeled receptacle for Asbestos waste□ The glovebag is constructed and installed in such a manner that it surrounds the object or area to be decontaminated and contains all Asbestos fibers released during the removal process□ All workers □□□□ are permitted to use the Glovebag Method must be properly trained, experienced, and skilled in this method□
- NN□ Grinding□ Means to reduce to powder or small fragments and includes mechanical □□□□□□□□ or drilling□
- OO□ HEPA Filter□ A high-efficiently particulate air □□□□□□□□ filter capable of trapping and retaining 99.97 percent of all monodispersed particles □□□□□□□□ fibers equal to or greater than 0.3 microns in mass median aerodynamic equivalent diameter□
- PP□ HEPA Vacuum Equipment□ Vacuuming equipment □□□□ a HEPA filter system□
- Holding Area□ A room in the Equipment Decontamination Enclosure located between the □□□□□□□□ and an uncontaminated area□ The Holding Area consists of a □□□□□□□□ □□□□ an Air Lock connecting it to the □□□□□□□□ and an Air Lock connecting it to the uncontaminated area□
- RR□ Isolation□ The sealing of all openings into a work Area□
- SS□ Isolated non-contained□□ work Area□ A work Area □□□□□□□□ is isolated, but has not been plasticized and may or may not be equipped □□□□ a Decontamination Enclosure System□
- TT□ Leak-tight□ Means that solids, dust, or liquids cannot escape or leak out□
- Movable Object□ A unit of equipment, furniture or other building component □□□□□□□□ is detached or can be detached from the building □□□□□□□□ destructive methods or results□
- VV□ Miscellaneous ACM□ Means building material containing more than one percent □□□□□□□□ asbestos that is not surfacing or TSI□
- Negative Air Pressure Equipment□ A portable local exhaust system equipped □□□□□□□□ HEPA filtration and capable of maintaining a constant, low velocity air flow into contaminated areas from adjacent uncontaminated areas□

- Negative Initial Exposure Assessment□A demonstration by the employer, □□□□
□omplies □it□ the criteria in □aragraph □□□2□□C□□8 CCR □1□29, that employee
exposure during an operation is expected to be consistently below the PEL and
Excursion Limit□
- YY□ NIOSH□National Institute of Occupational Safety and Health□
- Non-Friable Asbestos-Containing Material□Material that contains more than one 1□
percent Asbestos by weight in □□□□ the fibers have been locked in by a bonding
agent, coating, binder, or other material so that the Asbestos is well bound and will
not release fibers during any appropriate end-use, handling, demolition, storage,
transportation, processing, or disposal□
- AAA□ Operations and Maintenance (O&M) Activities□Means repair and maintenance
operations which disturb an amount of ACM that does not exceed one 60" by 60"
waste bag□
- BBB□ Owner's Representative□The agent of the Owner or the Owner's Representative
who shall observe the work, perform tests, verify that abatement methods and
procedures specified by the Contract Documents are being complied with, and
reports all observations and test results to the Owner or the Owner's
Representative□
- CCC□ Permissible Exposure Limit (PEL)□ An airborne concentration of asbestos,
Crocidolite, Crocidolite, Amosite, Tremolite, Anthophyllite, Actinolite, or a
combination of the six types of asbestos□in excess of 0.1 fibers per cubic
centimeter (1000) of air as an eight (8) hour time-weighted average (TWA) as
determined by the method prescribed in Appendix A of 29 CFR 1926.1101□
- DDD□ Personal Monitoring□ Sampling of Asbestos fiber concentrations within the
breathing zone of an Asbestos worker□
- EEE□ Phase Contrast Microscopy (PCM): NIOSH Method 7400 using "A" counting rules.
- Plastic□To cover floors, walls and other structural elements of a work Area with
plastic sheeting as herein specified with all seams securely taped□
- GGG□ Presumed Asbestos Containing Material (PACM)□Means thermal system insulation
and surfacing material found in buildings constructed no later than 1980□
- Project IH Consultant: Owner's Industrial Hygiene Consultant (Owner's
Representative) who will provide independent, third-party industrial hygiene
consulting services on behalf of the Owner□Such services may or may not include
conducting on-site work observations, materials or environmental testing, and/or
consulting with the Owner□
- III□ Regulated Area□Means an area established by the employer to demarcate areas
where Class I, II, and III asbestos work is conducted, and any adjoining area where
debris and waste from such asbestos work accumulate□and a work area within
which airborne concentrations of asbestos, exceed or there is a reasonable
possibility they may exceed the permissible exposure limit□Requirements for
regulated areas are set out in Title 8 CCR 1□29□
- Regulated Asbestos Containing Material (RACM)□The EPA in the National
Emission Standard for Hazardous Air Pollutants (NES)AP defines RACM as a
friable asbestos containing material, but Category I non-friable asbestos containing
material that has become friable, and Category I non-friable asbestos containing

material that will be or has been subjected to sanding, grinding, cutting or abrading, or d Category II non-friable asbestos containing material that has a significant probability of becoming or has become crumbled, pulverized, or reduced to powder by the forces exerted to act on the material in the course of demolition or renovation operations regulated by Subpart M

KKK Removal All herein-specified procedures necessary to remove Asbestos-Containing materials from the designated areas and to dispose of these materials at an acceptable site

LLL SDS Safety Data Sheet

MMM Sooter Room A room between the Clean Room and the Equipment Room in the Worker Decontamination Enclosure that is hot and cold or warm running water, and suitably arranged for complete sootering during decontamination The Sooter Room comprises an Air Lock between contaminated and clean areas

NNN Suracing ACM Means building material containing more than one percent (1%) asbestos that is sprayed, troweled-on or otherwise applied to surfaces such as acoustical plaster on ceilings and fireproofing materials on structural members, or other materials on surfaces for acoustical, fireproofing, and other purposes

OOO Surfactant A chemical wetting agent added to water to reduce surface tension and improve penetration

PPP TCLP means the Toxicity Characteristic Leaching Procedure as specified in EPA 3051-86, Test Methods for Evaluating Solid Waste

TSI Thermal System Insulation ACM Means building material containing greater than one percent (1%) asbestos that is applied to pipes, fittings, boilers, breeching, tanks, ducts or other structural components to prevent heat loss or gain

RRR Visible Emissions Means any emission, or evidence of emissions, including, but not limited to dust, debris, particles, or fibers coming from any RACM, ACM, ACCM, or ACM that are visually detectable without the aid of instruments Visible emissions include, but are not limited to, any RACM, ACM, ACCM, or ACM found outside of contained work areas or outside of leak-tight containers

SSS Sootroom A room between the Work Area and the Holding Area in the Equipment Decontamination Enclosure System where equipment and waste containers are decontaminated The sootroom comprises an Air Lock

TTT Wet Cleaning The process of eliminating Asbestos contamination from building surfaces and objects by using jets, mops, or other cleaning tools that have been damaged with water, and afterwards disposing of these cleaning tools as Asbestos-contaminated waste

Work – Means the obligation of the Contractor under the Contract Documents Work includes, unless specifically exempted by the Contract Documents, the furnishing of all materials, labor, equipment, supplies, plant, tools, scaffolding, transportation, superintendence, permits, inspections, obtaining any approvals, insurance, taxes, and all other services, facilities, and expenses necessary for the full performance and completion of the requirements of the Contract Documents Work also means that which is furnished, produced, constructed, or built pursuant to the Contract Documents

- VVV Work Area (Also known as "Regulated Area")—Designated rooms, spaces, or areas of the Project in which Asbestos Abatement actions are to be undertaken or which may become contaminated as a result of such abatement actions. A Contained Work Area is a Work Area which has been Isolated, Plasticed, and Equipped with a Decontamination Enclosure System. An Isolated Non-Contained Work Area is a Work Area which is Isolated but has not been Plasticed and may or may not be equipped with a Decontamination Enclosure System.
- Worker Decontamination Enclosure System—That portion of a Decontamination Enclosure System designed for controlled passage of workers, and other personnel and Authorized Visitors, typically consisting of a Clean Room, a Shower Room, and an Equipment Room.

1.1.3 QUALITY REQUIREMENTS

A Safety Compliance—In addition to detailed requirements of this Specification, comply with laws, ordinances, rules, and regulations of federal, state, regional, and local authorities and publications regarding handling, storing, transporting, and disposing of Asbestos waste materials. Submit matters of interpretation of standards to the appropriate administrative agency for resolution before starting the work where the requirements of this Specification and referenced documents vary, the most stringent requirement shall apply.

B Reference Standards

- Regulations—Applicable regulations pertaining to this asbestos abatement work include, but are not necessarily limited to, the following:
 - San Diego County Air Pollution Control Board (SDCAPCD)—Asbestos Removal, Renovation, And Demolition Rule 1206, dated 11/1/2017 or more recent.
 - California Division of Occupational Safety and Health (Cal-OSHA)—Construction Safety Orders - Asbestos, Title 8, California Code of Regulations section 1629, et seq. 8 CCR 1629.
 - California Health and Safety Code Section 25163, et seq.—Transportation of hazardous waste.
 - Title 22, California Code of Regulations, Section 66261.2 et seq.—Characteristics of hazardous waste Toxicity.
 - Title 22, California Code of Regulations, Section 66268.7(a)(1).
 - Title 22, California Code of Regulations, Section 66268.11 et seq.—Treatment Standard for Asbestos-Containing waste.
 - California Labor Code sections 6401 (Employer Registration) and 6401.9 (Determining the Presence of Asbestos Prior to Contracting for work).
 - California Safe Drinking Water and Toxin Enforcement Act of 1986 (Prop 65).

- Title 29, Code of Federal Regulations, Parts 1910 and 1926-1101
- Title 40, Code of Federal Regulations, Part 61, Subpart M, National Emission Standards for Hazardous Air Pollutants (NESAP)-U.S. Environmental Protection Agency (U.S. EPA)
- Title 49, Code of Federal Regulations, Part 172, U.S. Department of Transportation
- All other applicable Federal, State, and/or Local regulations, codes, and ordinances

Standards. Applicable industry standards pertaining to asbestos abatement work include, but are not limited to, the following:

- American National Standard Institute (ANSI) Publications
 - 92 Fundamentals Governing The Design and Operation of Local Exhaust Systems and
 - 882 Practices for Respiratory Protection
- National Institute of Occupational Safety and Health (NIOSH) Publications
 - Manual of Analytical Methods
 - Method 700
 - Method 702
- Applicability The most current version of each document will apply. Where conflicts among these regulations or standards exist, the more stringent requirement or interpretation will apply.
 - Asbestos and Other Fibers by PCM and
 - Asbestos Fibers by TEM
 - Underwriters Laboratories, Inc. (UL) Publication
 - UL 86 High Efficiency, Particulate, Air Filter Units
- C Before the commencement of any work at the site, the Contractor shall post bilingual (as appropriate) EPA, OSHA and DOS caution signs at entrances/egress to the work Area to comply with EPA, OSHA and DOS regulations.
- D Area Monitoring shall be performed by the Owner's Representative, which will conduct air sampling of the Abatement Project (1) outside the building, (2) immediately outside the work Area, (3) in the work Area, and (4) for work Area Clearance Testing after decontamination operations.
- E Personal Monitoring and other monitoring, if any, are required by law, or considered necessary by the Contractor for worker protection, shall be the responsibility of the Contractor.

1.1.4 SUBMITTALS AND NOTIFICATIONS

- A Personnel Training Prior to the start of work, the Contractor shall submit a declaration certifying that all Contractor employees have been adequately trained,

and photocopy of training certificates for each employee from their respective training agency or organization. When certified or other formal worker training is required by state or local agencies, Contractor may submit a photocopy of the employee's Asbestos Worker Certification Card in lieu of training certificates.

- B Respirators. Submit prior to the start of work, manufacturer's certification that the respirators to be used in this Project comply with government agency requirements. Contractor's certifications for each employee must clearly state that each employee has been fit tested and properly trained for respirators.

C Medical Examinations

- Submit proof that all individuals providing labor and/or professional services who will enter contaminated areas have had a current medical examination within one year of the Project start date.
- Provide the physician's interpretation of the medical examination to the Owner before the start of work or before the individual commences work on the Project.
- For individuals providing labor and/or professional services after the start of the Project, for whom a certificate has not initially been provided, submit the physician's interpretation prior to their participation.
- Alternative Option. Current medicals will be acceptable if they include a statement indicating the worker is fit to wear a negative pressure respirator while performing their duties.
- The Contractor shall resubmit the physician's interpretation for any worker or professional whose annual or employment termination medical examination becomes due while participating in the Project.
- This requirement can be waived or modified only by the Owner, either in writing or verbally, followed up in writing.

D Product Submittals and Substitutions. Comply with pertinent provisions of Section 01300.

- E Abatement Product Data. Not less than ten (10) business days prior to the date of intended use of the product on the work site, submit, before the start of work, the manufacturer's catalogue, the manufacturer's technical data for all types of encapsulants, sealers, all Safety Data Sheets, SDS and other items needed to demonstrate fully the quality of the proposed abatement materials. Under no circumstances shall proposed materials be used before written approval from the Owner, Owner's Representative. Submittals are required if the following materials are proposed (not necessarily a complete list). Do not submit data on products not proposed for this Project.

- 1 Encapsulant,
- 2 Sealer,
- 3 Protective Packaging,
- 4 Lagging adhesive,
- 5 Glovebags,
- 6 Resaturant, and
- 7 Solvents.

- Permits. Submit prior to the start of work proof satisfactory to the Owner, Owner's Representative that all required permits have been obtained. If no permits are required, submit a notarized letter stating such.

- G□ Hazardous Waste Transportation□ Submit prior to the start of work the method of transport of hazardous waste, including the name, address, EPA ID number, and telephone number of the Transporter□
- H□ Hazardous Waste Disposal Facility□ Submit for approval prior to the start of work the name, address, EPA ID number, and telephone number of the Hazardous Waste Disposal Facility□ to be used□
- I□ Contractor's Abatement Work Plan: Submit prior to the start of work a detailed work plan indicating the practices and procedures proposed for use in complying with the requirements of this specification□ Include in the plan schematic drawings of the definitions of the locations and general configurations of all regulated work areas□ Mark-ups of current project plans will suffice to satisfy this requirement□ For each regulated work area, indicate the planned locations of personal decontamination units, equipment decontamination and waste load-out chambers, exhaust air filtration units, air exhaust locations, temporary utilities locations, work area view ports and any other elements or conditions of significance to the controlled completion of the work□ e.g., location of sanitary or storm drains that will require protection□ The text of the Work Plan should address the sequencing of the asbestos work□ the interplay of any skilled trades involved in the performance of the work□ the methods to be used to assure the safety of site workers and visitors to the site□ a disposal plan including the on-site location of secured waste storage areas□ and a detailed description of the methods to be employed to prevent environmental impairment of the work site and its surrounding area□ Explain upon the use of methods of removal to prohibit visible emissions from within the work areas, and for the packaging and transport of removed asbestos waste or debris□

Submit a plan shall include□

- 1□ Location of Asbestos Work Areas□
- 2□ Layout and construction details of Decontamination Enclosure Systems□
- 3□ Project schedule including important milestones, critical paths and interplay of trades involved in the work□
- Personal air monitoring procedures□
- Detailed description of the method to be employed in order to control pollution, including negative air equipment calculations□
- 6□ Names of Superintendent, Foreman, Project Manager and other key personnel, and their day time and emergency telephone numbers□
- 7□ Security Plan including sketches necessary to clearly describe the plan□
- 8□ Emergency evaluation plan for injured workers, compressor failure, fire and other emergencies□
- 9□ Fire/Earth Plan including any sketches necessary to clearly describe the plan□
- 10□ Contingency Plan□ Submit a Contingency plan for emergencies including, but not necessarily limited to, fire, accidents, medical emergencies, power failures, differential air pressure "negative air" system failures, or any other event that may require modification of decontamination methods or work area isolation procedures□ Include in the plan specific procedures for work area isolation and decontamination□ **Note:** Noting in this specification should be interpreted as instructions to impede the rapid and safe egress from the work areas□ nor to impede the provision of adequate medical attention in the event of an emergency□

No work shall commence until verification of required notifications is made by the Owner, Owner's Representative.

- M Provide Proof of Contractor's License and Asbestos Certification from the Contractor Licensing Board, and Proof of registration with the Division of Occupational Safety and Health in accordance with California Labor Code, Section 601. Submit Proof of Bid copies of State license for asbestos abatement, copy of insurance policy, including exclusion from agent stating in plain language the coverage provided and the fact that asbestos abatement activities are covered by the policy. Information on who provides your training, who often provides medical surveillance, who often performs and who is personal air monitoring on abatement workers conducted.
- N Encapsulant manufacturer's certification when required that the Contractor is an approved applicator of the encapsulants to be used on this project.
- O Scaffolding. Submit to the Owner's Representative prior to abatement work, certification from a licensed Civil or Structural Engineer that the scaffolding design and installation is safe and adequate for the purpose for which it will be used. Submit copy of scaffolding permit when required by local regulatory agencies.

1.1.5 ADMINISTRATION OF THE CONTRACT

- A All work is to be performed under the observation of the Owner's Representative, who shall be free to enter and review all work.

1.1.6 SAFETY

- A Prior to the start of work, the contractor shall submit written procedures for the evaluation of injured workers. In the event of serious injury, aid shall not be delayed to comply with standard decontamination procedures. The contractor is responsible for determining whether the severity of the injury warrants bypassing standard decontamination procedures to ensure prompt medical attention.
- B Lock Out-Tag Out, as necessary establish a program consisting of energy control procedures, employee training on the job site to discuss job specific hazards. When the asbestos removal poses a safety risk in relation to any energized power sources, the power will be isolated and locked out by use of a physical device that will be unable to be removed by any unknown party. If an energy source is not capable of being locked out, then incorporate a tag-out system. If a tag-out device which is capable of being locked out, the tag out device shall be attached at the same location that the lock out device could have been attached.
- C Engage a fall protection plan program for the work associated with roofs, ladders, and rigging equipment which poses a fall safety hazard. The plan shall be enforced by the on-site supervisor in charge of the project. A preconstruction safety meeting will be conducted by the on-site supervisor and all on site employees to review specific job hazards.

1.1.7 TRAINING PROGRAM

- A All employees shall receive AHERA MAP training, which includes the proper handling of asbestos-containing materials, covering all aspects of work procedures and protective measures. This includes the use of protective clothing and respiratory protection, proper use of scoopers, entry and exit procedures from work areas, and compliance with OSHA and DOS regulations. Workers scheduled to use the Glovebag Method must be properly trained, experienced, and skilled in this specific method.

Additionally, each employee shall be educated on the health risks and implications associated with asbestos exposure, including illnesses that can result from inhaling airborne asbestos fibers. This education shall emphasize the increased risk of lung cancer from asbestos exposure, particularly for individuals who smoke. Employees must understand the proper use and limitations of respiratory equipment, the purpose of medical surveillance, and the importance of monitoring airborne asbestos levels in relation to health and respiratory protection.

The training program shall comply with all applicable federal, state, and local regulatory requirements.

- B Emergency evaluation procedures to be followed in the event of a worker injury or compressor failure shall be included in Worker Training Program.

1.1.8 DRESS AND EQUIPMENT

- A Work clothes shall consist of disposable full-body coveralls, head covers, boots, rubber gloves, sneakers or equivalent. Sleeves at wrists and cuffs at ankles shall be secured. Fire retardant full-body coveralls are required in areas of open flame, or where required by local regulations.
- B Eye protection and hard hats shall be available as appropriate or as required by applicable safety regulations.
- C Provide Authorized Visitors with suitable protective clothing, headgear, eye protection, and footwear whenever they are required to enter the Work Area.

1.1.9 RESPIRATORS

- A Respiratory protective equipment shall be National Institute of Occupational Safety and Health (NIOSH) approved in accordance with the provisions of 29 CFR 84 unless superseded by local regulations or more stringent requirements. Respiratory instructions shall be posted in the Clean Room.
- B Full-face or full-length air-purifying respirators with EPA filters may be worn during the reparation of the Work Area, performance of repair work, use of glovebag techniques and decontamination work, provided Work Area fiber concentrations are less than 0.1 f/cc.
- C When supplied air respirators are not required, the Contractor shall provide workers with approved, permanently personally-issued and marked respirators with

changeable filters. The Contractor shall provide a sufficient quantity of filters approved for Asbestos so that workers can change filters during the workday. Filters shall not be used any longer than one workday or whenever an increase in breathing resistance is detected. The respirator filters shall be stored at the job site in the Clean Room and shall be totally protected from exposure to Asbestos before their use.

- D Workers shall always wear a respirator, properly fitted on the face, in the Work Area, from the initiation of remediation work until all areas have been given written clearance by the Owner's Representative.

Part 2 – PRODUCTS

1.2.0 GENERAL

- A Contractor shall furnish, provide and utilize the following products in the Work Area as specified:

1.2.1 PROTECTIVE COVERING (PLASTIC)

- A Polyethylene Sheeting. Polyethylene sheeting used shall be in compliance with NFPA Standard 701 fire testing, with flame spread ≤ 5 and smoke development rating of ≤ 70 when tested by ASTM E-8. Minimal thickness shall be 6-mil.
- B Polyethylene sheeting. Six (6) mil for protection of floors, walls, ceilings, doors, windows, fixed equipment, HVAC supply and return openings, and critical barriers.
- C Spray Poly as a liquid must be non-flammable, non-toxic, vapor free, and not noxious when dry, poly must be Class A rated, with flame spread ≤ 20 , have a fuel contribution of zero, and smoke development of ≤ 110 by ASTM method E-8.

1.2.2 TAPE

- A High quality vinyl or fabric duct tape.
- B Duct Tape 2" or wider, or equal, and capable of sealing joints of adjacent sheets of plastic, and for attachment of plastic sheet to finished or unfinished surfaces of dissimilar materials, and capable of adhering under both dry and wet conditions, including use of amended water.

1.2.3 PROTECTIVE PACKAGING

- A Waste Containers. Bags, drums, bins, etc. must be suitable for loading, temporary storage, transit, and unloading of asbestos waste without rupture, or otherwise causing asbestos exposure to persons nor releases to the atmosphere. Use of rigid primary containers (bins, boxes, drums, etc.) is preferred and recommended. Where rigid primary containers are used, they shall be lined with a secondary leak tight barrier of poly sheeting or poly bags of minimal thickness of 6-mil. All containers used for disposal of asbestos-containing waste shall be labeled in accordance with applicable regulations, and in accordance with the requirements of 8 CCR Section 1-29.

- B Bilingual labels (English and other appropriate languages) on containment glove bags, waste packages, contaminated material packages and other containers shall be in accordance with EPA, OSHA and DOT standards

1.2.4 WARNING LABELS AND SIGNS

- A As required by 29 CFR 1910.1001, 29 CFR 1910.1200, 29 CFR 1926.1101 and other pertinent state and local regulations including 8 CCR 1529, whichever is the most stringent
- B Signs must be lettered in the language(s) necessary to communicate the safety hazard warnings to workers or visitors reasonably expected to be at the job site

1.2.5 WETTING AGENTS

- A Materials will be sprayed with water containing an additive to enhance penetration. The additive or wetting agent will be polyoxyethylene at a concentration of one ounce per five gallons of water or as otherwise specified by manufacturer. The spray of this solution must be applied to prevent fiber disturbance preceding the removal of the materials. The asbestos will be sufficiently saturated to prevent emission of airborne fibers in excess of the exposure limits prescribed in the current OSHA standards referenced in these specifications. DRY REMOVAL WILL NOT BE ALLOWED EXCEPT WITH WRITTEN APPROVAL FROM EPA or BECAUSE OF FREEZING WORK AREA TEMPERATURES

1.2.6 LAGGING ADHESIVE

- A Shall meet NFPA 90A Code, such as Arabol, Childers CP2, Insul-Cousti 102, or approved equal

1.2.7 GLOVE BAGS

- A The glove bag typically constructed of six mil transparent regulated plastic as two 24 inch wide - rolling long sleeve rubber gloves, one 24 inch wide - rolling water and sleeve, an internal tool pouch, and an attached labeled reticulate for Asbestos waste

1.2.8 TOOLS AND EQUIPMENT

- A All tools and equipment shall at least conform to minimum and industry standards and California Code of Regulations (CCR)
- B Equipment
 - 1 Negative air pressure equipment. EPA filtration systems shall have filtration equipment in compliance with ANSI Z92-2006, local exhaust ventilation. No air movement system or air filtering equipment shall discharge unfiltered air outside the Work Area
 - 2 Respirators shall be NIOSH approved for use with asbestos, lead, universal waste, or other contaminants anticipated in the work activities

3. Contractor is fully responsible for complying with OSHA, CalOSHA rules for other safety equipment, such as hard hats, safety harnesses, eye protection, gloves, footgear, and any other safety devices used on the site.
- Pressure differential manometer with readable tape shall be provided by the Contractor including calibration documentation.

C. Tools

1. Shovels and scoops shall be rubber or plastic, suitable for use in plasticized containment.
2. Saws, brushes, utility knives and other hand tools shall be of good quality and suitable for the intended uses. The Contractor shall keep an ample supply on hand for the completion of the work.

D. Manometer

1. Shall have a built-in alarm. Continuous hard copy readout optional.

E. EPA Vacuums

1. Shall comply with ANSI 92-2006.

F. Vacuum Loaders

1. Shall have EPA filtration system in compliance with ANSI 92-2006.
2. Meets or exceeds OSHA, DOS and EPA safety regulations.
3. Fully-enclosed negative pressure system.

1.2.9 LUMBER

- A. Shall be flame retardant and carrying markings certifying such properties.

1.2.10 SOLVENTS

- A. Shall be non-toxic, non-carcinogenic, nonflammable flash-point in excess of 200°F, nonreactive with or damaging to materials it will come in contact with and approved for indoor use by regulatory agencies. Provide ventilation of work area as required by manufacturer. Vent exhaust to the exterior of the building and in a manner that will not result in adverse effects to other areas of the facility, adjacent facilities or public areas. Solvents shall not be used in areas where food stuffs are stored.

PART 3 – EXECUTION

1.3.0 WORKER PROTECTION

Provide respiratory protection in accordance with OSHA Regulation 29 CFR 1926.1101 and appendices. ANSI 2882-1980 Respiratory Protection regardless of negative exposure assessments. There shall be NO EXCEPTION to this requirement. As minimum protection,

Provide workers with sufficient sets of protective full body clothing. Suits and clothing shall consist of full body coveralls and headgear. Provide eye protection and hard hats as required by applicable safety regulations. Non-disposable type protective footwear shall be left in the contaminated equipment room/regulated area until the end of the asbestos abatement work, at which time such items shall be disposed of as asbestos waste or shall be thoroughly cleaned of all asbestos containing materials. Disposable type protective clothing, headgear and footwear may be used and shall be disposed of as asbestos waste. Bare feet will not be permitted. Provide authorized visitors with suitable protective clothing, headgear, eye protection and footwear whenever they are required to enter work areas.

1. Bilingual (English and other appropriate language) Work Protection Procedures must be posted in the Clean Room in the first language of all workers is English, the bilingual procedures are attached.
2. Each Worker and Authorized Visitor shall, upon entering the job site, Remove street clothes in the Clean Room and put on a respirator and clean protective clothing before entering the Equipment Room or the Work Area.
3. All workers shall, each time they leave the Work Area, Remove gross contamination from clothing before leaving the Work Area, Proceed to the Equipment Room and remove all clothing except respirators, still wearing the respirator, Proceed naked to the showers, Clean the outside of the respirator with soap and water while showering, remove the respirator thoroughly shampoo and wash themselves.
4. Following showering and drying off, each worker shall proceed directly to the Clean Room and dress in their personal clothing. Before reentering the Work Area, each Worker and Authorized Visitor shall put on a clean respirator and shall dress in clean protective clothing.
5. Contaminated protective clothing and work footwear shall be stored in the Equipment Room when not in use in the Work Area. At appropriate times or upon completion of Asbestos Abatement, dispose of protective clothing and footwear as contaminated waste, or launder in accordance with government regulations.
6. Workers removing waste containers from the Equipment Decontamination Enclosure shall enter the Holding Area from outside wearing a respirator and dressed in clean disposable coveralls. No worker shall use this system as a means to leave or enter the washroom or the Work Area.
7. The disposable clothing worn outside the Work Area shall be of different color or markings from the disposable clothing worn inside the Work Area.
8. Workers shall not eat, drink, smoke or chew gum or tobacco, or utilize sanitary facilities at the work site except in established locations outside the regulated work areas, and enclosures. Provide and post, the decontamination and work procedures to be followed by workers as described in these specifications.

9. Workers and Authorized Visitors with beards or who are unshaven shall not enter the Work Area.

B. Medical Examinations and Histories

- Before exposure to airborne asbestos, the Contractor shall provide each employee or professional service provider at the Project site with a current comprehensive medical exam, which includes a history of respiratory and gastrointestinal diseases. The exam shall meet the requirements outlined in:

- **29 CFR 1910.1001**
- **29 CFR 1910.134**
- **29 CFR 1926.1101**
- **Title 8 CCR, Section 5208 and Section 1529**

2. The Contractor shall submit a current Medical Examination report for each employee.

3. The medical report shall include a statement from the examining physician indicating whether the employee can or cannot:

- function normally while wearing a respirator.
- use a respirator without impairing the safety or health of the employee or other employees.

No employee will be allowed to enter the Work Area without first providing a copy of their medical examination to the Owner's Representative. The employee's medical exam must be approved by the Project HSE Consultant before entry.

C. Employee Identification

1. The Contractor shall furnish an employee roster to the Owner's Representative for each Work Shift. Each employee entering the Work Area shall have in his possession a plastic-coated identification tag with the employee's photograph, name, age, height, weight, and eye color. Each employee shall bring to the Job at least two forms of identification, one of which has his/her photograph.

1.3.1 WORK AREA PREPARATION

- A. All asbestos related removal work designated by Cal OSHA as Class I or Class II asbestos work shall be completed in accordance with Cal OSHA Construction Safety Orders for Asbestos 8 CCR 1529. Where conflicts between Work Area Preparations as described in the regulations versus Section 1.3.1 exist, the more stringent interpretation shall apply.
- B. Electrical Lock-out. The Contractor, in coordination with the County, is responsible for the shutdown and disconnection of all electrical power within the Work Area for the purposes of this Section. In this section, the Work Area is defined as including all wall, floor and/or ceiling cavities which will be opened as a result of the removal of wall, floor or ceiling materials. The Contractor will arrange for temporary power and lighting, and will ensure safe installation of temporary power sources and equipment per applicable electrical code requirements. The Contractor should notify the County in writing before disconnecting any power or communication lines that may service the subject buildings or adjacent buildings.
- C. HVAC Isolation. The Contractor is required to shut down and isolate mechanical heating, cooling, and ventilating air systems to prevent contamination or fiber dispersal to other areas of the building. During the work, HVAC vents and any other airway openings into and out of the Work Area will be sealed with barriers consisting of

minimum 2 layers of 6-mil poly sheeting and duct tape "critical barriers" In the event of any containment breaches, filters in the HVAC systems will be removed and disposed of as asbestos-contaminated waste

- D Work Area Containment Each regulated Work Area will be regulated and isolated "contained" from all building areas not a part of the Work. All critical openings including, but not limited to, doorways, windows, tunnels, ducts, grills, diffusers, or openings through which ducting, piping or conduit passes are to be sealed securely with duct tape, spray adhesives, plastic sheeting or by other means, as necessary, to prohibit the passage of air out of the regulated work area. When removal of ACM from the exterior of a building is conducted using manual non-powered tools or equipment, and that process does not generate a Regulated ACM or require containment, the work area isolation may be achieved using barrier tape or other appropriate means to demarcate the perimeter of the regulated work area. Any fixed objects to remain within the enclosed work area will be cleaned using EPA vacuum equipment and/or wet cleaning methods as appropriate, and completely enclosed with plastic sheeting. The plastic sheeting shall be, at a minimum, 6-mil fire-rated poly. If a containment is utilized as a regulated area then the Contractor will inspect the containment for gaps, breaches, tears, leaks, holes or other deficiencies. The Contractor will conduct a similar inspection not less than once at the start of each work shift. However, the Contractor will be responsible to ensure the integrity of the containment at all times. Containment deficiencies shall be corrected immediately and with utmost priority upon discovery.
- E Decontamination Facilities At a minimum, a 3-chamber Personnel decontamination decontamination unit with functioning squeegee will be constructed and used whenever Class I Work is being conducted. See Section 2.1 above. Cover the floor under the decontamination units, boxes, and equipment with at least one layer of 6-mil poly. Securely attach the poly sheeting to the floor. A Personnel decontamination unit squeegee will be constructed contiguous with each Class I regulated work area. A curtained doorway will be constructed to separate individual chambers within a Personnel decontamination unit, as well as at ingress and egress points. The decontamination units shall be constructed in a manner so as to be free of physical hazards e.g., lagged metal or exposed wood surfaces. Alternate decontamination facilities may be used for compliance with Class II asbestos work or asbestos roofing removal work. **To the extent feasible, a personnel decon unit must not be used for waste load-out.**
- F Movable and Loose Items Movable and loose items located within the work areas and not removed by the Owner are to be cleaned using EPA-filtered vacuum equipment and/or wet cleaning methods, as appropriate, and will be removed from the work area to a temporary location designated by the Owner.
- G OSHA Class I Work Area Isolation For Work Areas within OSHA Class I asbestos work is to be conducted removal of thermal system insulation (TSI) or surfacing material, the Contractor will erect a full, diminished air pressure enclosure. In addition to sealing critical openings, a minimum of one layer (additional layers may be required based on the localized conditions) of fire-rated 6-mil plastic sheeting will be installed on the walls, floors, and ceilings as appropriate for the location and/or type of materials being removed. Exceptions to this may apply to the removal of TSI by means of glovebag techniques. In the case of TSI removal using glovebags, full-room "Secondary Containment" or partial-room "mini-enclosure" containment structures may, at the Project I/C Consultant's discretion, be additionally required. Floor layers shall be applied making sure that plastic is turned-up at the wall at least 16 inches and sealed to wall layers. All layers shall be sealed by overlapping the turned-up floor plastic a minimum of 12 inches. All joints and seams for each layer shall be glued and taped securely in a manner so as to prohibit water or air movement through the attached sheetings.

- OSHA Class II Work Area Isolation For Work Areas Within OSHA Class II asbestos work is to be conducted, the Contractor will prepare the Work Area in accordance with the regulatory requirements of Cal-OSHA 8 CCR 1529 et seq. and SDCAPCD Regulation Rule 1206. In addition to sealing critical openings, a minimum of one layer of additional layers may be required based on the localized conditions. Fire-rated 6-mil plastic sheeting will be installed on the walls, floors, and/or ceilings as appropriate for the location and/or type of materials being removed. Floor layers shall be applied making sure that plastic is turned-up at the wall at least 16 inches and sealed to wall layers. All layers shall be sealed by overlapping the turned-up floor plastic a minimum of 12 inches. All joints and seams for each layer shall be glued and taped securely in a manner so as to prohibit water or air movement through the attached sheeting. In addition, a diminished air pressure enclosure, as documented by manometric measurements, is required for all OSHA Class I and II work. OSHA Class I Work Area isolation controls may be used for Class II work.
- J For Work Areas Within OSHA Class II asbestos work is being conducted on the exterior of the building, and the asbestos work does not require containment under negative pressure, then the contractor may isolate the work area using barrier tape or other appropriate measures to demarcate the regulated work area perimeter and prevent unauthorized entry. Critical openings, such as windows, doorways, louvered grills, HVAC intakes or other openings to the building located within the work area must be sealed and prevented from opening while the abatement work is being carried out. Plastic sheeting shall cover all horizontal surfaces within the work area to sufficiently capture all falling debris and prevent surfaces from being contaminated during removal.
- K Work Area Obscurity The Contractor will endeavor to block or obscure the view of the public into the asbestos abatement work areas but retain appropriate view portals.
- K Adjacent Areas Building areas immediately adjacent to regulated asbestos removal areas, such as corridors or hallways which are not themselves subject to asbestos material removal, but are necessary routes to and from regulated work areas, must be protected by the Contractor to prevent damage and/or contamination. Openings from these areas into areas where asbestos material removal activities will be conducted will have curtained doorways to further minimize air passage into non-regulated areas. The Contractor will also be responsible to make all required notifications to trades or other building occupants in areas adjacent to regulated abatement work areas.
- L Emergency Egress The Contractor shall establish emergency and fire egress from the Work Areas, or establish alternative egress satisfactory to the County and to local emergency authorities or other applicable agencies.
- M All exits leading out of regulated work areas shall be marked in bold lettering "EXIT" or "Emergency Exit." Exit markings shall be in the primary language(s) appropriate to communicate with the workers present in the work area.
- N Work Area Viewing Windows If a containment is utilized as a regulated area then the Contractor will provide and construct observation windows into all regulated work area containments. The viewing windows will be of a visually transparent material of approximately 1/8" to 2" in size and/or will be constructed and maintained so as to allow unobstructed observation of the entire work area from outside the containment.
- O Work Area Communications The Contractor will be responsible for establishing and maintaining clear communications between the personnel in the work areas and those stationed outside, such that those communications can be maintained throughout

need for workers to perform an exit from the work area that could require decontamination.

- P Differential Air Pressure Prior to the start of asbestos removal work, the Contractor will install EPA-filtered differential air pressure equipment (also known as "exhaust fan units" or "negative air machines") as specified herein, to maintain a diminished air pressure differential within the Work Area. The system shall not exhibit any visible emissions to the outside air and shall be designed and operated in accordance with the requirements in 40 CFR, Part 61, Section 61.12. These exhaust fan units will remain in place within a regulated Work Area throughout the abatement and decontamination phases of the work until the required visual and/or clearance air testing has been satisfactorily achieved. A minimum pressure differential of -0.02 inches of water column (-0.02" w.c.), with respect to the air pressure of the area outside a Work Area, will be established and must be maintained at all times within all regulated Work Areas. Sufficient number of exhaust fan units shall be utilized to achieve a minimum of four air changes per hour, per containment. The Contractor shall have sufficient auxiliary units on-site and/or in place to maintain this requirement throughout the work, including backup or replacement units in the event of equipment failure. Air exhausted from this equipment shall be exhausted to the outdoors and, to the extent feasible, away from occupied areas around the building. Documentation of satisfactory differential air pressure shall require the use of a manometer, as specified herein. In the opinion of the Project Lead Consultant, the differential air pressure units are judged to be in need of maintenance or in any other way fail to meet typical industry standards, the units shall not be placed into operation on this project.
- Q Pre-Abatement Work Area Inspections Prior to the start of asbestos removal work, the Contractor, accompanied by the Project Lead Consultant, will conduct a detailed inspection of all equipment and Work Area isolation preparations to assure that appropriate engineering controls are in place and are functioning sufficiently to contain asbestos fibers to within the Work Area. The concurrence of the Project Lead Consultant will be required to determine that a Work Area has undergone adequate preparation to proceed with asbestos removal work. A Pre-Abatement Work Area inspection will be conducted for each regulated Work Area and each individual inspection must be documented in writing. Such documentation will be signed by the individual(s) conducting the inspection. A copy of each such documentation will be obtained by the Project Lead Consultant for conveyance to the Owner.

1.3.2 ASBESTOS REMOVAL

The Contractor is to follow all EPA NES/APS, DOS, Cal/OSHA, SDAPCD Rule 1206 guidelines as it relates to this material including but not limited to the California Code of Regulations, Title 8, Section 1529.

OSHA Class I Asbestos Work Materials designated for removal as OSHA Class I Asbestos Work will be removed in full compliance with the Class I Work Practices Reg. Methods of Compliance described in Cal OSHA's Construction Safety Orders for Asbestos 8 CCR 1529, et seq. All ACM or ACCM designated for removal as Class I Asbestos Work will likewise be removed in full compliance with the SDCAPCD, Rule 1206. Class I Asbestos Work may not commence until the work area(s) is/are prepared in accordance with section 131 of this Specification.

OSHA Class II Asbestos work floor tiles, mastics, and other materials designated for removal as OSHA Class II Asbestos work will, at a minimum, be removed in full compliance with the Class II work practices and Methods of Compliance prescribed in Cal-OSHA's Construction Safety Orders for Asbestos 8 CCR 1529, et seq. All ACM or ACCM designated for removal as Class II Asbestos work will likewise be removed in full compliance with federal, State, and local air pollution control board regulations. Class II materials should, to the extent feasible, be removed with hand tools, so that they remain substantially intact. Class II Asbestos work may not commence until the work area is prepared in accordance with section 1.3.1. **Floor tile and/or floor tile mastic removal operations involving the use of mechanized work methods, including motorized floor buffers, must be conducted utilizing OSHA Class I Work Area Isolation methods and engineering controls as described in section 1.3.1 of this Specification section. This includes preparing the Work Area(s) in accordance with requirements for the removal of RACM.** ACM shall be wetted prior to and during its removal, handling, and waste disposal.

Work Area Regulation All asbestos removal Work Areas shall be regulated to prevent unauthorized entry. Isolation methods shall include, but not necessarily be limited to the use of barrier tape, yellow "Caution" and/or OSHA's "Danger Asbestos" and OSHA's "Danger Asbestos" signs. The Contractor shall maintain a daily Work Area entry/exit log and require all persons entering the Work Area to sign in and out. The Contractor will bear responsibility for controlling entry into the Work Area.

Exterior Work Areas

- Establish a Regulated Work Area (RWA) delineated by barrier tape
- Open air abatement with wet methods shall be utilized during the abatement
- All non-porous items shall be decontaminated utilizing proper wet wiping and EPA-vacuuming practices
- Place 6-mil polyethylene drop sheets in the RWA
- Establish a decontamination area at the entry point to the RWA
 - Install a 3-stage decontamination unit consisting of a clean, sooper, and equipment room
- Establish a proper waste load-out area attached to the RWA and
- Post asbestos warning signs on all entry and exits into the RWA
- The perimeter of the RWA shall be lined with 6-mil polyethylene and sandbags to prevent the potential of waste water traveling off-site. The waste water should be properly filtered prior to disposal

Once the RWA is established and asbestos activities begin, no access should be permitted without the required personal protective equipment

- All asbestos activities shall be performed by workers wearing proper personal protection equipment (PPE) including EPA filtered respiratory protection, as prescribed in 8 CCR 1529 and 8 CCR 1500
- All asbestos activities shall be performed by workers wearing proper personal protection equipment (PPE) including EPA filtered respiratory protection, as prescribed in 8 CCR 1529 and 8 CCR 1500
- Once abatement work begins, only authorized personnel with proper personal protective equipment shall be permitted to enter the RWA

- All asbestos activities shall be performed using wet methods (use of amended water, water with a chemical wetting agent or surfactant, to adequately wet ACMs and EPA filtered vacuums)
- Removal/disturbance of ACM shall be conducted in a manner that leaves the materials substantially intact, to the extent feasible
- Small pieces of ACM or mingled debris should be properly wetted and manually using hand tools placed in transparent, leak-tight containers or packaging
- At the end of each work shift, any ACM containing debris shall be covered with 6-mil fire retardant, reinforced polyethylene topped with sandbags transparent containers, sealed, labeled and disposed of as asbestos waste
- After asbestos abatement activities are complete, the Consultant shall perform a post asbestos abatement visual inspection to determine if all asbestos containing materials and visible contamination have been successfully removed
- If any asbestos containing materials or visible contamination are observed, additional abatement will be required until all asbestos containing materials and visible contamination are removed
- All equipment used in the R/A (e.g. excavators, Bobcats, portable toilets, etc.) shall be properly decontaminated by EPA vacuum, wet hosed, EPA vacuum prior to being transported off-site
- Any porous items used in the R/A (e.g. sandbags, straw saddles, etc.) shall be disposed as asbestos-containing waste
- The interiors of the 10-yard containers shall be properly decontaminated by EPA vacuum, wet hosed, EPA vacuum and visually cleared of ACM prior to being transported off-site
- Prior to exiting/leaving the R/A, all personnel, materials, equipment, containerized waste and anything else leaving the R/A shall be thoroughly decontaminated via EPA vacuuming, wet-hosing and EPA vacuuming again and sealed as necessary

A. Before removal, Asbestos materials shall be sprayed with Amended Water. The Asbestos materials shall be sufficiently saturated without causing excessive dripping and prevent emission of airborne fibers, at any time, in excess of Maximum Allowable Level. Spray materials repeatedly during the work process to maintain a wet condition. If the materials are not easily saturated, then the work Area shall be constantly misted to keep fiber emissions minimal. Material abatement will be removed following the NESAP Adequately Wet Guidance Manual.

B. Asbestos material shall be removed in manageable sections by a multi-person team, some of whom are wetting and the remainder removing and cleaning. Any material that falls to the floor shall be wetted and picked up immediately. Material shall not be allowed to dry out. Material drops shall not exceed 1 foot or 18 inches exceeding 10 feet above ground level, provide leak-tight routes to transport waste to the ground. The waste material must be transported to the ground in clear leak-tight packaging. Before a second area can be started, removed material shall be packed into approved and labeled packaging while it is still wet. The outside of all containers shall be clean before leaving the work Area. Move containers to the Storage Room. When Equipment Decontamination System is not required, wet-clean each container thoroughly, and move to Holding Area pending removal to uncontaminated areas.

- C□ Asbestos material applied to concrete, steel decks, beams, columns, pipes, tanks, and other nonporous surfaces shall be wet-cleaned to a degree that no traces of debris or residue are visible□
- D□ Asbestos material debris, drippings, splatters, and overspray on surfaces within accessible ceiling cavities and other accessible areas shall be removed in the same manner and cleaned to the degree as specified above.
- E□ The Work Area shall be kept orderly, clean and clear of work materials, polyethylene sheeting, tape, cleaning material, and footing, and all other disposable material or items used in the Work Area□ These materials shall be packed into properly labeled protective packaging and removed from the Work Area□
- Protective packages and drums containing Asbestos materials shall be cleaned and stored in the isolated Holding Area until that time when the materials are to be loaded and hauled to the Hazardous Waste Disposal Facility for burial□ The packages and drums shall be stored in piles no higher than four feet, and in a manner that will not result in damage to the packages or drums□ Transport bags in covered drums or carts from the Holding Area to the transport□
- G□ Equipment removal procedures□ Clean surfaces of contaminated equipment thoroughly by wet-scrubbing or wiping before moving such items into the Passroom (Boiler Room) when Equipment Decontamination System is not required□ For final cleaning and removal to uncontaminated areas□ Ensure that personnel do not leave Work Area through the Equipment Decontamination Enclosure□
- Do not bag water used during abatement activities□ Properly filter and drain water into building sanitary drain unless prohibited by local regulations□ Filter shall have a maximum pore size of 10 micron□
- I□ Non-riable materials□
 - 1□ Remove materials with wet methods and in a manner that will not create visual emissions or exposures above the PEL□ Adequately wet the materials before, during and after removal□
 - 2□ Do not use saws, grinders, mixers, bead blasters, buffers or other such mechanical equipment without EPA filtered local exhaust ventilation□
 - 3□ The Work Area shall be kept orderly, clean and clear of work materials, debris, etc□
 - Package non-riable materials in two layers of leak-tight containers consisting of 6-mil poly bags or lined containers labeled as Non-Hazardous Waste – Non-riable Asbestos, or in accordance with the disposal facility's requirements□
- Roofing Materials□
 - 1□ Use removal methods that will keep the tearing and raving of the roof membrane to a minimum□ If sawing tools are used, they must be factory equipped with EPA filtering devices, or perform in a manner that will not release visible dust emissions□ Roofing debris made riable shall be misted with amended water before transportation to dumpsters□ Do not use excessive amounts of amended water that may result in leakage into the

building. Any additional amended water, if necessary when the roofing debris is in the dumpster. Install, when possible, a protective tarp under the Work Area or dumpster where amended water leakage may result in property damage.

- a. ACM/ACCMs shall be bagged or containerized as it is removed. Wastes shall not be dropped or thrown to the ground unless the material is carried or passed to the ground by hand, it shall be lowered via covered, dust-tight chute, crane, hoist, or other means that prevent the waste from being dropped or thrown.
- b. Roofing shall be removed so that no felts are visible. Asphal bitumen residue need not be removed from the substrate unless directed otherwise in the Contract Documents.
- c. Have adequate material on hand and available labor to protect enclosed roof areas from water intrusion during inclement weather.
- d. Do not commence dirt removal work if inclement weather is probable. NOTE: Contractor shall be responsible for water damage as the result of the Contractor's work or failure to perform work. [Contractor shall be responsible for maintaining the abated portions of the roof free from moisture intrusion for seven (7) calendar days following the written notice of completion, or until the roofing Contractor have been given Notice to Proceed by the Owner, whichever comes first].
- e. The Work Area shall be kept orderly, clean and clear of work materials.
- f. Package roofing materials in labeled double six (6) mil lined containers or bags, or in meet the disposal facilities requirements.

1.3.3 DECONTAMINATION OF WORK AREA

A. Decontamination procedure for "Regulated" Work Areas:

- 1. Visible accumulations of loose asbestos containing waste material shall be cleaned up using rubber or plastic dustpans and rubber squeegees or EPA-filtered vacuums. Metal shovels may also be used except in the vicinity of plastic sheeting, critical barriers and isolation barriers, which could be perforated by these tools. To pick up excess water and gross wet debris, a wet-dry shop EPA vacuum dedicated to asbestos abatement may be used. This cleaning shall be done whenever there is sufficient asbestos waste material to fill a single leak-tight bag/container, or this cleaning shall be done at the end of each work shift whenever shall occur first. Visible debris shall be maintained adequately wet.
- 2. All visible accumulations of ACM, ACCM, debris tools, and unnecessary equipment shall be removed from the work area.
- 3. Prior to removal from a Work Area, the Contractor will decontaminate all tools, equipment, mechanical equipment. Decontamination will include, but

not be limited to wetting with amended water, EPA-vacuuming, and containerizing tools into subsequently decontaminated containers. Prior to removal from the Work Area, EPA-filtered vacuum cleaners will be wetted and wrapped, bagged, or otherwise containerized for transport from the Work Area. Additionally, differential air pressure equipment is to be sealed with poly sheeting and tape, and externally decontaminated before removal from the Work Area. All equipment will be subject to inspection by the Project I/C Consultant prior to demobilization from a regulated Work Area.

- Cleaning may be discontinued when there is no visible debris. The Contractor shall perform a complete visual inspection of the Work Area.
- Post-Abatement Work Area Inspections. Subsequent to the completion of the cleaning, decontamination phases, the Contractor's Supervisor, accompanied by the Project I/C Consultant, will conduct a detailed visual inspection of the Work Area to ensure that the identified asbestos has been removed and that the Work Area has been adequately cleaned. The concurrence of the Project I/C Consultant will be required to determine that a Work Area has undergone adequate cleaning. This Post-Abatement Work Area Inspection will be conducted for each regulated Work Area and each individual inspection must be documented in writing. Prior to conducting a Post-Abatement Work Area inspection, the Contractor will remove and replace the primary filter ("pre-filter") on each differential air pressure unit ("negative air machine"). All non-essential equipment is to be decontaminated, as described herein, and removed from the Work Area prior to commencing the Post-Abatement Work Area inspection.
- 6□ □□ On successful compliance with the requirements for Post-Abatement Work Area Inspection, and unless otherwise specified, the Contractor shall apply a "lock-down" encapsulant to all horizontal and vertical surfaces within the Work Area. The encapsulant must be compatible with the existing surfaces. Following application of the encapsulant, a sufficient amount of time must pass to allow for the encapsulant to dry. The Contractor should plan, at a minimum, to allow for an extended preferably overnight drying period. In all instances, the decision as to whether an adequate drying period has elapsed will be at the discretion of the Project I/C Consultant. □□ On completion of the asbestos-related work the Contractor shall apply an encapsulant to all surface edges of the disturbed asbestos-containing materials within the Work Area to prohibit fibers becoming airborne.
- 7□ On the satisfactory Post-Abatement Work Area Inspections have been documented in writing and after any applied encapsulant has been allowed to dry the Contractor will remove the toplayer of elasticon the walls, floors, and/or ceilings as appropriate. The inner elasticon layer (present and primary isolation barriers (i.e. "critical barriers") on vents, grilles, diffusers, etc.) are to remain in place for the clearance air sampling. Care should be taken to avoid pulling down any remaining layers of elasticon sheeting. In Work Areas where a single layer of elasticon has been used on the walls, floors, and ceilings where applicable, that elasticon layer shall be removed, and critical barriers are to remain in place until air clearance sampling is completed and satisfactory air clearance criteria have been achieved.

Removal of plastic layers and isolation engineering controls ("teardown") may not occur without the knowledge and authorization of the Project IH Consultant.

8. Upon written notification from the Owner's Representative that the Work Area has passed the standard for Clearance Testing, the Contractor shall apply the asbestos-free replacement materials, when included in the Contract, and re-establish objects and systems as specified in these Specifications.

Daily site visit and Clean-up Procedures- Asbestos Abatement Activities

Each day, at the conclusion of each work shift throughout the duration of the abatement project, the asbestos abatement Contractor shall conduct a site visit and clean-up of all interior and exterior work areas of the project site. This will include work area for all of the on-site trades providing on-site services near or around the asbestos containing materials as listed within the applicable survey reports and this specification. Any asbestos building material debris that is encountered during the end of shift walk-through will be promptly cleaned using wet methods and thoroughly EPA vacuumed.

1.3.4 ASBESTOS DISPOSAL

- A. All Asbestos-Containing Waste Material (ACW M) shall be kept adequately wet until sealed in leak-tight containers or clear leak-tight packaging.
- B. Asbestos Waste from control devices shall be mixed thoroughly with water to form a slurry.
- C. No visible emission shall be discharged to the outside air from collection, mixing, setting, and handling of ACW M.
- D. After setting, all ACW M shall be sealed in leak-tight containers or clear leak-tight packaging and must remain adequately wet. Materials that will not fit into containers without additional breaking shall be placed into clear leak-tight packaging.
- E. The containers or packaging specified above shall be labeled using warning labels specified by Federal OSHA or Cal/OSHA under 29 CFR 1926.101(k)(8)(iii) or 8 CCR 1291(k)(8)(C). Printed in letters of sufficient size and contrast so as to be readily visible and legible.
- F. Asbestos-Containing Wastes, including removed ACM and debris, poly, critical barrier materials, suits, respirator filters, vacuum EPA filters, water filters, and other asbestos-containing items shall be properly packaged for disposal.
- G. Use 6 mil plastic bags with a gooseneck seal, drums, or other type of sealed container approved for asbestos-containing materials.
- H. Containers removed from the Working Area must be removed by workers who have entered from uncontaminated areas dressed in clean coveralls. Workers must not enter from uncontaminated areas into the class room or the Work Area. Contaminated workers must not enter the Work Area through the Equipment Decontamination Enclosure System.
- I. Contractor shall deliver Asbestos-Containing Waste Materials to the CCRB permitted and designated hazardous waste Disposal Facility in accordance with the guidelines of the EPA.
- J. At the conclusion of work, the Contractor shall provide evidence such as a "Bill of Lading" or "Hazardous Waste Manifest" that the Asbestos-Containing Waste Material has been disposed of at the CCRB permitted and approved hazardous waste Disposal Facility. The evidence shall be submitted with the final request for payment. The Contractor shall

K. The Contractor shall be responsible for the safe handling and transportation of all Non-Hazardous and/or Hazardous Waste, generated by the Project of this Contract, to the designated Non-Hazardous and/or Hazardous Waste Disposal Facility. The Contractor shall bear all costs for all claims, damages, losses, and clean up expenses against the Owner or the Owner's Representative, including but not limited to attorney's fees rising out of or resulting from, Asbestos spills on the site or spills in route to the Hazardous Waste Disposal Facility.

L. Non-riable Debris Disposal, Roofing, Transite, resilient floor tiles, mastik and other Non-riable Asbestos-Containing Materials shall be disposed of as non-riable asbestos waste.

OSHA CFR 1926.1101 and DOS CFR Title 8 Section 1.29 requirements. Analysis shall be conducted according to 29 CFR 1910.1101, Appendices A and B which describe the OSHA Reference Method.

2. On the OSHA and DOS sampling requirements are satisfied the Contractor shall conduct, as a requirement of this Contract, not less than one (1) personal air sample, twice per calendar week, to determine 8-hours TWA exposures and thirty (30) minute Excursion Limit exposures of workers operating in each Work Area. Samples shall be collected within the workers' breathing zones. Samples shall be taken for each ten (10) workers from the time preparation work is started until the Work Area has passed Clearance Testing. NOTE: Contractor required personal sampling of each worker is not necessary while the Contractor is conducting representative OSHA and/or DOS required sampling or when Supplied-Air Respirators in pressure demand mode are in use.
3. The Contractor shall report Personal Monitoring results to the Owner's Representative within 8 hours from the end of the work shift. Worker exposures to airborne Asbestos concentrations shall not exceed the PEL of 8-hours TWA of 0.1 fibers per cubic centimeter of air, or the 15-minute period Excursion Limit.
3. The minimum amount of air samples collected per work area by the Contractor will be 1 30-minute STEL sample per day (1 personal sample per employees per day per activity).

C. Clearance Testing

1. The Contractor should not be released until final visual inspection and EPA PCM NIOS 7000 final air clearance has been achieved in the regulated areas.

1.3.6 STOPPING THE WORK

- A. If at any time, the Owner's Representative decides that Work Practices are violating pertinent regulations, these Specifications or, in his opinion, endangering workers or the public, he will immediately notify the Contractor followed up in writing that operations shall cease until corrective action is taken, and the Contractor shall take such corrective action before proceeding with the work. Loss or Damages due to a Stop Work Order shall be borne by the Contractor.

END OF SECTION I

SECTION II

LEAD-BASED PAINT

LEAD-BASED PAINT ABATEMENT AND LEAD-RELATED CONSTRUCTION WORK

SPECIFICATION

10-25-2024

DESCRIPTION

All work included Contractor shall furnish all labor, materials, services, permits, insurance separately covering the handling and transportation of Lead Based Material or Lead-Containing Material and Lead-Containing Waste Material and equipment which is specified, shown, or reasonably implied for lead-related construction work associated with the Lead-Based and/or Lead-Containing Paints listed in the following table.

Table 2-1: Identified LCMs/LBPs
Titan Environmental Solutions
November 7, 2023

Reading	Room / Location*	Side ¹	Structure	Condition ²	Substrate	Color	Lead Concentration (mg/cm ²)	Classification ³
0	Garage	A	all	D	Brick	Yellow	0.3	LCM
6	Garage	B	all	I	Cinder Block	Brown	1.2	LBP
7	Garage	B	Column	I	Concrete	Orange	0.0	LCM
8	Garage	B	Conduit	I	Metal	Orange	0.0	LCM
9	Garage	B	all	I	Concrete	Yellow	0.3	LCM
10	Garage	C	all	D	Concrete	Yellow	0.2	LCM
11	Garage	B	all	I	Brick	White	0.1	LCM
12	Garage	B	all	I	Concrete	White	0.1	LCM
13	Garage	C	all	D	Concrete	White	0.2	LCM
14	Garage	C	all	I	Cinder block	White	1.3	LBP
15	Garage	C	Column	I	Concrete	White	0.3	LCM
17	Garage	C	Roll up door	I	Metal	Gray	0.3	LCM
18	Garage	C	all	D	Concrete	Blue	0.2	LCM
19	Garage	C	all	I	Cinder block	Blue	1.0	LBP

Legend

¹Side: N = North, E = East, W = West, S = South

²Paint Condition: I = Intact, D = Deteriorated

³Classification:

- BDL = Below the RSC detection level (0.1 mg/cm²)

- LCM = Lead Containing Materials (LCM); ≥0.1 mg/cm²

- LBP = Lead-Based Paints (LBP); ≥1.0 mg/cm²

- San Diego Municipal Code – Lead-based paint or lead paint means paint or other surface coatings that contain an amount of lead equal to, or in excess of, one milligram per square centimeter (1.0 mg/cm²) or one-hundredth of one percent (0.01%) by weight.

Locations are estimates based on accessible materials located in the survey area only. Additional locations may be present at the Subject Property.

**Table 2-2: Identified LCMs/LBPs
SCS Engineers Memorandum Report
February 10, 2023**

READING NO	SITE	ROOM	SIDE	COMPONENT	SUBSTRATE	CONDITION	COLOR	FLOOR	RESULTS	ACTION LEVEL	PBC	PBC ERROR	PBL	PBK	UNITS	DEPTH INDEX
78	300 West Ash Street	Garage	B	Wall	Brick	Poor	Brown	First	LCC	1	0.0	0.1	0.0	1.1	mg / m ²	379
110	300 West Ash Street	Garage	D	Wall	Concrete	Poor	Orange	First	LCC	1	0.6	0.0	0.3	0.6	mg / m ²	330
100	300 West Ash Street	Exterior	C	Door Frame	Metal	Poor	Beige	First	LCC	1	0.7	0.2	0.7	0.8	mg / m ²	110
106	300 West Ash Street	Exterior	C	Door	Metal	Poor	Yellow	First	LCC	1	0.6	0.1	0.6	0.0	mg / m ²	1
160	300 West Ash Street	Exterior	C	Drain Line	Metal	Poor	Gray	First	LCC	1	0.6	0.2	0.6	1.1	mg / m ²	110
160	300 West Ash Street	Exterior	C	Drain Line	Metal	Poor	Gray	First	LCC	1	0.7	0.1	0.7	1.9	mg / m ²	102
166	300 West Ash Street	Exterior	C	Drain Line	Metal	Poor	Gray	First	LCC	1	0.7	0.2	0.7	1.2	mg / m ²	117
170	300 West Ash Street	Exterior	D	Wall	Concrete	Poor	Beige	First	LCC	1	0.0	0.1	0.0	1	mg / m ²	210
176	300 West Ash Street	Exterior	D	Wall	Concrete	Poor	Beige	First	LCC	1	0.7	0.1	0.7	1.0	mg / m ²	222
178	300 West Ash Street	Exterior	D	Column	Concrete	Poor	Beige	First	LCC	1	0.0	0.1	0.0	0.8	mg / m ²	176
180	300 West Ash Street	Exterior	A	Indoor Frame	Wood	Poor	Beige	First	LCC	1	0.6	0.2	0.6	1	mg / m ²	109
191	300 West Ash Street	Exterior	A	Wall	Concrete	Poor	Beige	First	LCC	1	0.7	0.7	0.7	-0.7	mg / m ²	201

192	3rd West Ash Street	Exterior	A	Wall	Concrete	Poor	Beige	First	LCC	1	0.1	0.1	0.1	0.8	mg/l m ²	1.8
193	3rd West Ash Street	Exterior	A	Column	Concrete	Poor	Beige	First	LCC	1	0.6	0.1	0.6	1.3	mg/l m ²	0.8
194	3rd West Ash Street	Exterior	A	Column	Concrete	Poor	Beige	First	LCC	1	0.6	0.2	0.6	0.6	mg/l m ²	3.81

SCS Engineers', Asbestos and Lead Based Paint Survey report, identified the following:

- Four Offices - There were no CDP or Lead-Based Paint Coated Components Identified During This Inspection
- Interior Garage – Yellow floor stripe
 - Door frame, Water Heater Closet
 - Door frame, Man Door Entry
- Bathroom- There were no CDP or lead-based paint coated components identified during this inspection
- Exterior – Awning Post, Porch Beam Awning, Door frame and window frame

B. Contractor is required to verify the scope of work prior to commencing work, including quantities of materials to be removed, and to determine the degree of difficulty in removing the identified materials

C. Applicable Publications. The work conducted shall comply with all applicable federal, state and local regulations. Applicable guidelines and standards listed in this Scope of work include, but are not necessarily limited to:

1. Department of Housing and Urban Development (HUD) "Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing" dated June, 1990
2. Code of Federal Regulations (CFR) Publications
 - 29 CFR 1910.13 Respiratory Protection
 - 29 CFR 1910.1 Safety and Health Hazard Prevention Signs and Tags
 - 29 CFR 1910.17 Lockout/Tagout
 - 29 CFR 1910.1020 Access to Employee Exposure and Medical Records
 - 29 CFR 1910.102 Lead General Industry Standard
 - 29 CFR 1910.1200 Hazard Communications
 - 29 CFR 1926.11 Gases, Vapors, Fumes, Dusts and Mists
 - 29 CFR 1926.62 Lead Construction Standard
 - 29 CFR 1926.200 Signs, Signals and Barriers
 - 40 CFR 61 National Emission Standards for Hazardous Air Pollutants
 - 40 CFR 261 Criteria for Classification of Solid Waste
 - 40 CFR 261 Identification and Listing of Hazardous Waste Disposal Facilities and Practices

10/2/2000 ARDO'S MATERIALS ABATEMENT SPECIFICATION

- 80 CCR 262 Standards Applicable to Generators of Solid Waste
 - 80 CCR 700 Lead-Based Paint Poisoning Prevention in Certain Residential Structures
 - 3 California Code of Regulations (CCR) Publications
 - 8 CCR 1532.1 Construction Safety Orders - Lead
 - 8 CCR 198 General Industry Safety Orders - Lead
 - 8 CCR 100 Respiratory Protective Equipment
 - 17 CCR Div 1, Chapter 8 Lead Based Paint and Lead Abatement
 - 882-201 Practices for Respiratory Protection
 - 871-2010 Eye Protection
 - National Institute of Occupational Safety and Health (NIOSH) Publications
 - Manual of Analytical Methods, 2nd Edition, Volume 1, Physical and Chemical Analysis Method (PCAM)
 - Method 7082
 - Method 7300
 - 6 Other Local or Regional Regulations that apply to Lead-Related Work

Please note Contractor is responsible for ascertaining the extent to which these regulations will affect removal operations and to comply therewith.

This project is not a lead abatement project. The lead activities on this project are being conducted due to the demolition of buildings listed. The areas identified and any estimated quantities mentioned in the lead sampling report or this specification are approximate and should be confirmed by the Contractor through on-site verification.

The lead removal specification in place for this project is to work in conformance with all local, state, and federal regulations requirements concerning lead in construction. Contractor is required to follow all local, state, and federal regulations requirements concerning all aspects of working around lead materials whether stated in the removal specification or not and for any conflict that arises between the lead removal specification and any regulations requirements, the most current and most stringent will apply.

Since the building listed above is undergoing renovation or demolition, **all construction personnel** performing the construction work should be properly trained in lead-related construction. California regulations define lead-related construction work as, "Construction, alteration, painting, demolition, salvage, renovation, repair, or maintenance of any residential, public or commercial building, including recreation and cleanup, which, by using or disturbing lead containing material or soil, may result in significant exposure of individuals to lead."

CAL-OSHA Regulations (Title 8 CCR Section 1532.1 and 29 CFR 1926.62) apply to all construction work where an employee may be occupationally exposed to lead, and therefore may be applicable to renovation or demolition projects involving paints with any concentration of lead. When conducting construction activities, which disturb lead in any amount or that may create an exposure to workers, the employer is required to provide worker protection and conduct exposure assessments. All California employers should consult Cal- OSHA Regulations at Title 8, 1532.1, "Lead in Construction" standards for complete requirements.

DEFINITIONS

General Explanation A substantial amount of section language constitutes definitions for terms found in other contract documents. Certain terms used in Contract Documents are defined in this article.

- A** **Owner** State of California
- B** **Abate or Abatement** Means any set of measures designed to reduce or eliminate lead paint or lead-based paint.
- C** **Accredited or Accreditation** A person or laboratory accredited in accordance with Section 206 of Title II of the Toxic Substances Control Act (TSCA) and/or accredited by the American Industrial Hygiene Association (AIHA).
- D** **Aerosol** A system consisting of particles, solid or liquid, suspended in air.
- E** **Air Monitoring** The process of measuring the lead content of a specified volume of air.
- Authorized Visitor** The Owner, the Owner's Representative, testing lab, the Consultant/Engineer, emergency personnel or a representative of any federal, state and local regulatory or other agency having authority over the project.
- G** **Barrier** Any surface that seals off the work area to inhibit the movement of particles.
- Breathing Zone** A hemisphere forward of the shoulders with a radius of approximately 6 to 9 inches.
- I** **Ceiling Concentration** The concentration of an airborne substance that shall not be exceeded.
- Certified Industrial Hygienist (CIH)** An industrial hygienist certified in Comprehensive Practice by the American Board of Industrial Hygiene.
- K** **California Certified Lead Professional** means an individual who has a current Lead-Related Construction Certificate with the California Department of Public Health (CDPH). This includes Certified Inspector/Assessors, Project Monitors, Contractor Supervisors and Sampling Technicians.
- L** **Contractor** Means any business entity, public unit, or person performing the actual abatement for a lead abatement project.
- M** **Demolition** The breaking or taking out of any building component, system, finish or assembly of a facility together with any related handling operations.
- N** **Disposal Bag** A properly labeled 6 mil thick leak-tight plastic bags used for transporting lead waste from work and to disposal site.
- O** **Encapsulation** Means to resurface or cover surfaces and to seal or caulk seams with a durable material, so as to prevent or control tracking, taking lead-containing substances from becoming part of construction dust.

- P** Particulate media component used in respirators to remove solid or liquid particles from the inspired air
- PEA** High Efficiency Particulate Air (HEPA) filter capable of trapping and retaining 99.97% of particles greater than 0.3 microns in diameter
- R** EPA Filter Vacuum Collection Equipment or vacuum cleaner High efficiency particulate air filtered vacuum collection equipment that a filter system capable of collecting and retaining lead particles. Filters should be 99.97% efficiency for retaining particles of 0.3 microns or larger
- S** High-efficiency particulate air filter EPA refers to a filtering system capable of trapping and retaining 99.97 percent of all monodispersed particles 0.3 um in diameter or larger
- T** Interior Work Area A hallway, room or group of rooms in which abatement takes place on the inside of a property
- LB** Lead-Based Paint (LBP) Paint or other surface coatings that contain lead equal to or greater than one milligram per square centimeter (10 mg/m²) or more than 100 parts per million (ppm) by weight or more than five-thousand parts per million (ppm) by weight
- LC** Lead-Containing Paint (LCP) Paint or other surface coatings that contain lead equal to or greater than 0.1 mg/m² as measured by RMD or any detectable concentration by AAS or ICP analyses
- LR** Lead-Related Construction Work means any construction, alteration, painting, demolition, salvage, renovation, repair, or maintenance activity, including preparation and cleanup, that, by using or disturbing lead-containing material or soil, may result in significant exposure of adults or children to lead
- NP** 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
- NPVS** Negative Pressure Ventilation System A pressure differential and ventilation system in containments
- PM** Personal Monitoring Sampling of the lead concentrations within the breathing zone of an employee
- PDVS** Pressure Differential and Ventilation System A local exhaust system, utilizing HEPA filtration capable of maintaining a pressure differential with the inside of the Work Area at a lower pressure than any adjacent area, and which means recirculated air or generates a constant air flow from adjacent areas into the Work Area

- AB ☐ Protection Factor ☐ The ratio of the ambient concentration of an airborne substance to the concentration of the substance inside the respirator at the breathing zone of the wearer. The protection factor is a measure of the degree of protection provided by a respirator to the wearer.
- AC ☐ Repair ☐ Returning damaged lead-based paint to an undamaged condition or to an intact state so as to prevent particle release.
- AD ☐ Time Weighted Average ☐ TWA ☐ The average concentration of a contaminant in air during a specified time period usually 8-hours.
- AE ☐ Visible Emissions ☐ Any emissions containing particulate material that are visually detectable without the aid of instruments. This does not include condensed uncombined water vapor.
- AF ☐ Wet Cleaning ☐ The process of eliminating lead contamination from building surfaces and objects by using cloths, mops, or other cleaning utensils which have been dampened with water containing 1% trisodium phosphate (TSP) or diluted removal emulsant and afterwards thoroughly decontaminated or disposed of as lead-contaminated waste.
- AG ☐ 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. Work area is a Regulated Area as defined by 29 CFR 1926.62.

PART II – GENERAL

2.1.1 RELATED DOCUMENTS

Drawings, Contract Documents, and other Technical Specification sections apply to work of this section.

2.1.2 Known and Assumed Lead Painted Areas associated with the demolition project.

All paint found within the exterior and interior of this project will be treated as lead-based paint until released by the Owner's Representative. This will include a review of all historical data, current sample results, and negative exposure assessments (NEA).

2.1.3 SUMMARY OF WORK

A) Perform all planning, administration, execution, and cleaning necessary to safely remove and/or work around lead paint, as required as part of this contract in association with the activities scheduled to take place as indicated in the Contract Documents, exercising due care and utilizing proper protective

measures as necessary to prevent personnel exposures and environmental contamination

B. Identify location of all lead paint to be removed as indicated in the bid specifications and as identified during the pre-construction job walk and outlined in this section.

2.1.4 SCOPE OF WORK

A. Refer to any demolition key notes listed on any of the demolition floor plans provided by the Owner and the lead removal specification for this building for any demolition activities within this building. Some within a direct path of any of the lead materials, the Contractor will take necessary actions in working in and around the lead materials as listed, following the lead removal specification that is in place. All painted materials will be treated as lead containing whether stated or not within the lead removal specification. Several areas that contain asbestos and have been listed within the asbestos removal specification that has been required for this modernization are also painted. Cross reference the asbestos removal specification and the lead paint removal specification for details.

Damage to the paint containing lead is anticipated - reference both the lead
sealing and the asbestos sealing during this project.

1. Remove and properly dispose of all flaking and blistered paint containing any amount of lead from all work areas identified as required. Remove and properly dispose of any Restroom sinks, Restroom Toilets, Porcelain Sinks, Porcelain Drinking Fountains as lead containing.
2. Remove paint that contains any amount of lead that is in good condition from lead painted materials only as necessary to provide a clean surface for cutting, welding, or torching.
3. Properly package, characterize, transport and dispose of lead painted materials, paint "chips" and associated debris, cleaning materials and used personal protective equipment.
4. All building materials with paint attached, construction debris with lead painted building components, lead removal components, all associated removal debris, and restroom fixtures from the abatement shall be tested using the WET METHOD (TTLC and then TCLP, and/or STLC) as required for hazardous waste disposal. The collected small debris and paint chips that are to be disposed of by the Contractor will most probably be classified as a hazardous waste. Characterize packaged waste prior to removal of waste from the site. All waste stream sampling for lead waste generated by the lead abatement Contractor as listed will to be completed by the removal Contractor – removal waste stream sampling and reporting.

- 5. Transport the packaged lead painted waste to an approved landfill and dispose of following disposal requirements based upon profile sampling. Notify the Owner how the waste will be disposed prior to the waste leaving the site.
- 6. Perform personnel lead exposure monitoring and biological monitoring as required for the safety of the Contractor's workers.
- 7. The general contractor demolition contractor shall conduct all debris waste file sampling prior to disposal of demolition debris created during the project. Debris sampling following the State of California waste stream sampling criteria. Construction demolition waste stream sampling and reporting.
- 8. The general contractor shall notify all employees and sub-contractors of the presence of lead materials that may be in a direct path of their construction demolition activities. General lead awareness shall be completed for all personnel that may come in contact with lead materials as part of this construction project.

B. Work Not Included

- 1. Environmental air monitoring and clearance sampling - if needed for the Owner.

2.1.5 SUBMITTALS

- A. Provide submittals to the Owner's Representative at appropriate times in the execution of the work to allow for sufficient and prompt review by Owner's Representative. Revise and resubmit as necessary to establish compliance with the specified requirements.

2.1.6 WORKSITE CONDITIONS

Worker and Visitor Procedures. The Contractor is hereby advised that the U.S. Government has determined lead to be a POISON. Contractor shall provide workers and visitors with respirators, at a minimum, shall meet the requirements of OSHA and protective clothing during preparation of system enclosures, prior to commencing, during actual lead removal, and until final clearance tests are achieved.

2.1.7 WORKER PROTECTION

It is the responsibility of the Contractor to maintain adequate protective equipment and procedures for all his employees and those of subcontractors and suppliers at all times, and to instill in them a high level of safety-consciousness for the duration of the Project as they relate to all lead requirements for work being completed in the State of California.

2.1.8 QUALITY ASSURANCE MEDICAL EXAMINATIONS

Before exposure to lead-contaminated dust, provide workers with a comprehensive medical examination as required by 29 C.R. 1926.62 and 29 C.R. 1926.103. The

examination will not be required if adequate records show that employee has been examined as required by 29 CFR 1926.62 within the last year. Also required is baseline biological monitoring consisting of blood lead level and a Zincon/Protocor/Cyrin test prior to job assignment. Other requirements as defined in title 8 CCR 1321 also apply. All persons who may be exposed to lead shall be given a comprehensive physical as required in the lead standard. This physical shall include a base line lead in blood test to prove that blood lead levels are less than 20 ug of lead per 100 grams of whole blood.

Medical Records

Maintain complete and accurate medical records of employees for a period of at least 30 years or for the duration of employment plus 20 years, whichever is longer.

Training

The on-site consultant shall verify that each employee performing paint removal, disposal, and air-sampling operations has received training prior to the time of initial job assignment, in accordance with local, state, and federal standards. Lead in Construction Training in accordance with title 8 CCR 1321 as a minimum. Only properly trained and certified lead workers shall be allowed inside the exclusion areas during removal or cleaning. All on-site sub-trades that may be exposed to any amount of lead or come in contact with lead, shall receive Lead in Construction Training in accordance with title 8 CCR 1321 as a minimum.

Training Certification

Contractor will submit certificates signed and dated by the training facility and by each employee stating that the employee has received training all required lead training. A pre-start training meeting will take place with all employees over safety cards associated with this project.

Personal Protective Equipment (PPE)

All personnel who will be authorized to enter the areas of potential contamination will be fully qualified to wear respiratory protection as defined in 29 CFR 1910.133, 29 CFR 1926.62, Title 8 CCR 1321 and Title 8 CCR 1100. The abatement Contractor will assure that such personnel have received medical approval to wear respiratory protective equipment, and have successfully been fit tested with the brand, model and size of respirator that will be worn. Documentation of medical fitness and fit testing will be provided. These requirements will remain in effect for all personnel who enter the work area until air-monitoring results demonstrate that airborne levels of lead dust are below 30 micrograms per cubic meter of air, and fit-testing protocol proves that the areas are safe for unprotective habitation.

Effect to the extent that more stringent requirements are written directly into the Contract Documents, the following 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 codes were bound therewith. Where there is a conflict in requirements set forth in these regulations and standards, meet the more stringent requirement.

OSHA - U.S. Department of Labor Occupational Safety and Health Administration, Safety and Health Standards 29 CFR 1910.102 and 133, 29 CFR 1926.62

CalOSHA – California Division of Occupational Safety and Health, Safety and Health Standards 8 C.R. 208, 2100, and 2321

ANSI - American National Standard Practices for Respiratory Protection, ANSI Z89.2-2011

NIOSH - National Institute for Occupational Safety and Health Approved Respiratory Protection Devices and Lead Air Samples Analytical Methods

CDP – California Department of Public Health Title 17 Lead Regulations

The level of respiratory protection assigned will be based on the results of monitoring for airborne lead fumes and dust in the work area. The results of the air monitoring will be submitted to the Owner.

Permissible Exposure Limit (PEL)

1. 8-hours' Time Weighted Average (TWA) Concentration of lead to which any worker may be exposed to shall not exceed 0.05 mg/m³

Respiratory Protection Factors

from 8 CCR 2100 Table 1 – Assigned Protection Factors

<u>Respirator Type</u>	<u>Protection Factor</u>
Air Purifying respirator Negative Pressure respirator P-100 filter Full facepiece	10
Air Purifying respirator Negative Pressure respirator P-100 filter Full facepiece	10
Powered Air Purifying Respirator (PAPR) Positive Pressure respirator P-100 filter Full facepiece	1,000
Supplied Air Respirator Positive Pressure respirator Continuous Flow or Pressure demand or other Positive Pressure mode Full facepiece	1,000
Self-contained breathing apparatus (SCBA) Pressure Demand mode	10,000

Air Purifying Respirators

- 1 ☐ Respirator Face-Piece Provide full-face or full-head type respirators. Equip full face respirators with a nose cup or other anti-fogging device.
- 2 ☐ Filter Cartridges Provide, at a minimum, EPA type filters labeled with NIOS Certification for "P-100" and color coded magenta. In addition, a chemical cartridge section may be added, if required, for solvents, etc., in use. In this case, provide cartridges that have each section of the combination canister labeled with the appropriate magenta and black color code and NIOS Certification.
- 3 ☐ Non-permitted respirators Do not use single use, disposable or quarter face respirators.

All respirators and cartridges shall be NIOS approved for lead dust and fumes. All personnel shall initially wear at least a full-faced negative pressure respirator with approved cartridges for lead dust, mists, and fumes for paint spraying. **Contractor to submit a respirator protection program).**

Fit Testing

- 1 ☐ Initial Fitting Provide initial fitting of respiratory protection during a respiratory protection training course. Fit types of respirator to be actually worn by each individual. Allow an individual to use only those respirators for which training and fit testing have been provided.
- 2 ☐ On an Annual Basis Check the fit of worker's respirator by having irritant smoke blown onto the respirator from a smoke tube.
- 3 ☐ Upon Each Fitting Require that each time an air-purifying respirator is put on it be checked for fit with a positive and negative pressure fit test in accordance with the manufacturer's instructions or ANSI Z88.2-2011.

In addition to the initial fit test for the brand, model and size of respirator to be worn by each assigned worker, a field fit test to determine that the face piece properly seals will be performed each time the respirator is put on.

The following steps will be taken:

- a ☐ Adjust the respirator to the face according to the manufacturer's instructions.
- b ☐ Cover the air inlets with the palms of the hands.
☐ Gently inhale so that the face piece collapses slightly.
- d ☐ Hold your breath for ten (10) seconds.
- e ☐ The respirator shall remain slightly collapsed with no inward leaks detected.
- f ☐ Close the exhalation valve with the palms of the hands.
- g ☐ Exhale gently.

- ☐ A small build ☐ o ☐ positive ☐ pressure,
☐ it ☐ no out ☐ ard leaks,
- i ☐ Indi ☐ ates a good fit

All workers assigned to lead abatement related work will be provided sufficient sets of protective full-body disposable clothing. The suits will be taped at the wrists and ankles prior to entering the work area. Additional protective clothing will consist of disposable gloves, foot coverings and headgear. Eye protection and hard hats will be provided and shall be worn by all personnel in the exclusion or abatement areas. Furnish each employee required to wear a negative pressure respirator or other appropriate type of a respirator fit test at the time of initial fitting and at least every 6 months thereafter as required by 29 CFR 1926.62. Establish and implement a respiratory protection program as required by ANSI Z88.2, 29 CFR 1926.103, 29 CFR 1926.62, 29 CFR 1926.104.

Hazard Communication Program

Establish and implement a Board Communication Program as required by 29 C.F.R. 1926.119.

Employee Information, Training and Certification

The employer shall provide information about lead hazards, according to the lead communication standard (section 19 of Cal/OSHA Lead in Construction Standard) to all employees exposed to lead.

For all employees exposed to lead at or above the action level (AL) on any day, exposed to lead compounds that cause eye or skin irritation, or who perform any of the specified trigger tasks, the employer shall provide initial pre-placement training that includes all of the required content from the OSHA standard and its appendices.

Hazardous Waste Management

Contractor will submit a Hazardous Waste management Plan to the Owner prior to beginning any lead paint work. Federal, State, and Local Hazardous Waste regulations will be followed as well as these items that are to be addressed in the Contractor submitted Plan.

- a. Prior notification and site posting prior to any lead paint activities or disturbance. This may include but is not limited to reporting to CDP Form 801- at least 10 days before conducting lead-related construction work. Cal OSHA notifications at least 2 hours before conducting lead-related construction work involving any of the trigger tasks listed in the OSHA standard and required site tenant postings.
- b. Identification of hazardous wastes associated with the work.
Estimated quantities of wastes to be generated and disposed of.
- d. The 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.
- e. Names and qualifications (experience and training) of personnel who will be working on-site with hazardous wastes.

- List of waste handling equipment to be used in performing the work, to include cleaning, volume reduction, and transport equipment
- g□ Spill prevention, containment, and clean-up contingency measures to be implemented
- Work plan and schedule for waste containment, removal and disposal
- Waste shall be cleaned up and containerized daily

Safety and Health Compliance

In addition to the detailed requirements of this specification, Contractor shall comply with laws, ordinances, rules, and regulations of Federal, State, and Local authorities regarding removing, handling, storing, transporting, and disposing of lead waste materials. Comply with the applicable requirements of the current issue of 29 CFR 1926.62.

Competent Person

The Contractor shall have a competent person on site all times during the lead paint activities performing duties in accordance with 1926.62. They will be performing the following:

- A□ Certify that training has meet all federal, state, and local requirements
- B□ Review and approve lead-based paint removal plan for the compliance to the applicable reference standards
- C□ Continuously inspect lead based paint removal work for compliance with the approved plan
- D□ Perform air and dust sampling as required
- E□ Ensure that work is performed in strict accordance with the specs at all times
- Control work to prevent hazardous exposure to human beings and to the environment at all times
- G□ Certify the conditions of the work as called for in the specifications

PART 2 – PRODUCTS

2.2.1 PRODUCT HANDLING

- A□ Deliver all materials as described in this Section in the original packages, containers, or bundles bearing the name of the manufacturer and the brand name
- B□ Store all materials subject to damage on the ground, away from wet or damp surfaces, and under cover sufficient to prevent damage or contamination
- C□ Remove from the premises all damaged or deteriorating materials. Dispose of materials that become contaminated in accordance with applicable regulatory standards

2.2.2 LEAD PAINT OPERATIONS MATERIALS

- A□ Industry standard lead paint operations removal materials□To be listed in Contractor's submittal package□
- B□ Provide 30-gallon heavy duty type "17E" closed head, leak tight steel drums with tight sealing locking metal tops□
- C□ Provide paint sealant to be applied after loose and peeling paint has been removed from newly sanded painted surfaces□The paint sealant material is to be applied by the lead removal Contractor□The paint stripper product is to be pre-approved by the Owner prior to commencement of work□

2.2.3 EQUIVALENT PRODUCTS

- A□ The Owner will consider equivalent products or materials by other manufacturers for approval if the scheduled time for the material to be used□ Minimum information shall include Safety Data Sheet (SDS) and application recommendations for use on specific materials identified on this project□

2.2.4 TOOLS AND EQUIPMENT

- A□ Tools and equipment as specified in this specification and as industry standard for lead paint removal□

PART 3 – EXECUTION

The following general sequences of work are intended to provide guidance for performing the work□ Contractor shall address its specific sequencing in its work plan□ Contractor to have a CDP□ Certified lead supervisor on site at all times during lead related activities□

2.3.1 GENERAL

Prior to entry, Personnel will remove street clothing and put on respiratory protection, clean coveralls, head coverings and foot coverings□ Hard hats will be worn at all times□ At least two sets of disposable coveralls shall be worn when inside the restricted work area□

Clean respirators and protective clothing will be provided and utilized by every person entering the work area□ Personnel in designated personal protective clothing will then proceed to the work area□

Before leaving the work area, Personnel will remove any gross contamination from the outside of the respirators, their boots, and other protective clothing by vacuuming themselves off□ The EPA vacuum□ Personnel will proceed to peel off at least the outer protective disposable suit and place it into a properly labeled disposal barrel located near the designated exit site□ The Contractor may provide a shower, but it is not required for the paint stripping□ A shower is not supplied by the Contractor, then an area for washing the hands and face of the workers in an area segregated from the work area is required□ Personnel will only be EPA vacuuming themselves off prior to leaving the lead restricted

ones or storing. They will first vacuum themselves off and then go into the clean room to dress out in clean clothes. All protective equipment, and other contaminated equipment will be placed into labeled containers or plastic bags while still inside the restricted zones or containments. Equipment that is to be removed from the hazard zone shall be contained or bagged as described, or it shall at a minimum be set aside down or EPA vacuumed prior to exiting the contained lead work areas.

All wastewater from slopping if there is slopping, and other waters used for cleaning must be tested for disposal. It is, therefore, required that all water from cleaning or decontamination operations be stored in an onsite container.

Water for emergency eye wash and drinking shall, also, be provided at the decontamination site.

Place all tools, staging, etc. necessary for the work in the area to be isolated prior to erection of plastic sheeting drop cloths and boundary work enclosures.

Contractor shall shut down and lock out all electrical power to the area. Contractor shall fire in temporary power as specified from outside the work area for abatement activities. This includes lighting inside enclosure unless it is rated for a wet location.

Constructing Temporary Facilities

1. Owner may designate an area on-site for Contractor's use as a temporary hazardous waste storage site. Contractor is responsible for security of hazardous waste from the time it is generated until its ultimate disposal at the landfill.
2. Construct decontamination units for lead paint work as specified.
3. Inspect containers for leaks or corrosion weekly and keep written records of inspections on site.

2.3.2 CONTROL ACCESS

- A. Permit access to the lead-contaminated work areas only through the decontamination unit. All other means of access shall be closed off and sealed and warning signs displayed on the clean side of the sealed access.

Warning signs printed in English will be posted at the perimeter of the restricted area to provide notice of potential airborne lead. The signs will be located at regular intervals and at such a distance that personnel may read the signs and take necessary precautions required prior to entering the area. Signs shall conform to 29 CFR 1926.62. The sign shall be at least 20" by 14" displaying the following legend in the lower panel.

**WARNING
LEAD WORK
AREA POISON
NO EATING,
DRINKING, OR
SMOKING**

Entry and exit routes will be established and clearly marked. Control of site entry and exit will be established before the work begins.

Employee and authorized personnel will enter the containment areas through a worker site egress and exit site which must be at the decontamination site located at a convenient entry and exit point to building areas. Anyone who enters a work area must read this plan and sign an entry log upon entry and exit. All pertinent information, like the abatement plan, will be posted at this entrance and exit site.

Prior to entering the work area, personnel will read and become familiar with all posted regulations, personal protection requirements and emergency procedures. A sign-off sheet will be used to acknowledge that these procedures and regulations have been received and understood by all personnel.

Engineering controls will be established and maintained to control lead dust including the establishment and maintenance of the lead control area, decontamination system and continuous misting and EPA vacuuming by experienced, trained, certified abatement personnel from the abatement Contractor.

2.3.3 PREPARATION / EXECUTION

A. General Set up Operations – Paint Stabilization prior to demolition of lead painted building materials

Because of the low risk associated with this type of lead abatement, a full containment for lead abatement is not required. Lead safe work practices will be followed per title 17. There will be at least a lead restricted zone around all sites of paint scribe, and preparation for the scribing will be in accordance with the 1990 D Guidelines, Chapter 8, Tables 8-1 through 8-3.

1. Provide warning signs and barrier tape to demark the lead paint work area.
2. Contractor shall ensure that the lead contamination is confined within the work area and that all surfaces located in the work area are free from any lead accumulation when the work is completed. This shall be accomplished by creation of an impermeable containment.
3. Provide drop cloths of six mil polyethylene sheeting at the base of materials to be addressed. Extend drop cloths a minimum of six feet beyond the areas where lead painted materials will be scribed.
4. Install critical barriers consisting of one layer of 6-mil reinforced polyethylene sheeting.

Ensure that all barriers remain effectively sealed and taped for duration of abatement and subsequent cleaning. Visually inspect enclosure at the beginning of each work period. Repair damaged barriers and remedy defects immediately upon discovery. Contractor shall be responsible for environmental cleanup of areas contaminated due to failure of critical barrier system.

- 5. Construct separate worker decontamination units in compliance with OSHA guidelines concerning number, size and placement of airlocks, etc. Squeegee in worker decontamination unit shall open into airlock on both contaminated and uncontaminated sides. Construct decontamination units of appropriate materials including plywood and plastic sheeting. Squeegee in personnel decontamination unit shall contain both hot and cold running water. Sufficient squeegee units to comply with OSHA regulations. Post OSHA decontamination procedures in change room and equipment room for duration of Project. Decontamination units shall be constructed of at least 1/2" thick and shall have a lockable door. Provide keys for decontamination door to Owner and Engineer.
- 6. Install waste/water collection system. Collect squeegee and wash water for characterization and disposal. Squeegee and wash water shall be segregated from other waste, filtered through filters having not more than 5-micron pore size, and characterized for disposal as a separate waste stream. Dispose of used filters with solid waste. Install a sum pump of sufficient capacity to collect the amount of waste liquid and sludge expected to be produced.
- 7. Notify Abatement Consultant for observation and acceptance of all critical barriers, EPA filtration systems, and decontamination units before proceeding.

B. Paint Stabilization (addressing loose and flaking paint)

For Painted Substrates with Paint in Poor Condition (flaking, blistered, cracking)

- 1. Prepare work area as previously specified in Paragraph 3.03 of this section. For Exterior loose and flaking paint stabilization prepare the work area as stated 3.03 of this specification and follow exterior work practices. Work area shall consist of those areas where paint is in poor condition or cutting may occur. The intent is not total removal of paint but the stabilization of paint which may delaminate from the substrate during re-painting operations.
- 2. Remove lead paint which is in poor condition. Acceptable methods include wire brushing, or scraping. Do not use chemical strippers for removal of paint in poor condition. There shall be no visible emissions from any lead remediation work. All lead abatement work shall be done under wet conditions and methods shall be used to remove the loose and flaking paint safely. All paint scraping and scraping must be done in such a manner as to preclude any emissions of lead dust. The Contractor shall keep the dust down to bare minimum levels. Once removed, the immediate areas inside the containment shall be cleaned up by EPA vacuuming and wet mopping and EPA vacuuming again. The abatement Contractor must spray water mist to keep dust levels down, and EPA vacuum

up dust and any loose debris from the only that shall be placed on the floor or soils/c pavements during scraping to that debris. The abatement Contractor will use EPA vacuum, wet pipe, and EPA vacuum again and the conclusion of scraping. The abatement Contractor shall not use dry sweeping to clean up any loose leaded debris.

3. Only approved ladders or scissors lift shall be used to elevate workers, if necessary. All workers who are required to work at heights above four feet shall be equipped with lifelines and harnesses.
4. All paint flakes, and other debris that is generated from this operation shall be lightly wet mixed up by hand or EPA vacuumed and placed into a clearly labeled hazardous waste container. All lead paint chips, dust and debris shall be waste profiled prior to disposal per Federal, State, and local requirements.
5. The debris from the abatement shall be tested using the EPA METHOD 313 and then TCLP, and/or STLC as required for hazardous waste disposal. The collected small debris and paint chips that are to be disposed of by the Contractor will most probably be classified as a hazardous waste.
6. The abatement Contractor shall ensure that all areas of lead surface are thoroughly clean and free of dust and paint chips.
7. Package lead painted debris for waste characterization and transportation to disposal site following the disposal plan in this work plan.

If building material substrate cutting is required where lead paint is present, remove lead paint from areas where cutting will occur. Remove paint from a strip no less than 12 inches wide. Acceptable methods include chemical strippers and full scraping.

- a. Conduct area set up as listed above. Section 3.03.
- b. Perform paint stripping operations in accordance with manufacturer's directions including the recommended personal protective equipment.
- c. Perform the operation over a drop cloth to catch any paint chips which may be generated.
- d. Clean surface in accordance with manufacturer's recommendations. Use minimal amount of liquids necessary to remove stripper and lead paint materials.
- e. Segregate waste from chemical stripping operations for disposal as a separate waste stream.
- f. Lead painted materials must be cut into manageable pieces, use methods that will minimize dust. If open flame cutting methods are used in conjunction with chemical strippers, Contractor shall take adequate precautions to ensure against fire and explosion.

Air & Environmental Monitoring

Sampling of airborne concentrations of lead dust will be performed in accordance with 29 CFR 1926.62 and Title 8 CCR 1321. Air monitoring will be conducted by the Project I/C Consultant. The sampling may also be utilized during the project to ensure lead control areas are adequate and are not being breached.

Area monitoring will be conducted each shift during the abatement process at the designated limits of the control areas.

The Contractor shall collect personal samples, at their expense, for those workers who are anticipated to be at the greatest risk of exposure as determined by the onsite supervisor. Air samples will be taken on at least 20% of the work force or a minimum of 2 persons. Whenever is greater, during a work shift, the quantity of airborne lead dust monitored at the designated limits at any time exceeds $30 \mu\text{g}/\text{M}^3$ all work will be stopped and the Project Lead Consultant shall be immediately called to direct correction of the conditions causing the increased levels and notify the abatement Contractor. The Project Lead Consultant shall review the sampling data taken during that day to determine if conditions require any further change in work methods. Work shall resume when approval is given by the Project Lead Consultant. Adjacent areas are contaminated, the areas will be cleaned, monitored and visually inspected.

2.3.4 BUILDING CONTAMINATION

- A If it is determined by visual identification or air samples that building contamination has occurred as a result of the negligence and/or poor work practices of the Contractor, the Contractor agrees to clean the affected premises at no charge to the Owner. The Contractor also agrees to accept all liability for damages claimed or lawsuits brought by persons exposed to such contamination.
- B The Contractor shall be responsible for all costs incurred by the Consultant should other portions of the building become contaminated with lead dust as a result of the Contractor's poor work practices or other activities.

Cleanup and Final Clearance Testing

- A Provide general clean-up of work area concurrent with the stripping of lead paint. Do not permit accumulation of debris on workscape floor.
- B At the Owner's option, wipe samples will be collected around the various lead operation work areas and in "clean rooms" of decontamination units to document effectiveness of Contractor's isolation practices. Keeping lead contamination localized. If samples indicate levels higher than background levels, Contractor will be required to perform cleanup of contaminated areas at its own expense.
- C The Owner's Representative shall conduct containment/control area effectiveness air monitoring prior to, and throughout, stabilization and cleaning operations. If environmental sampling indicates lead levels higher than background levels, Contractor will be required to perform cleanup of contaminated areas at its own expense.
- D Lead Operations Clean up and Clearance testing.
 - 1 EPA-vacuum all surfaces to remove loose debris. Use all surfaces with a solution of trisodium phosphate (TSP) and water to remove dust and film. Dispose of filters frequently to avoid spreading contamination. Re-EPA vacuum all surfaces that have been wiped down.
 - 2 Notify the Owner's Representative for observation to determine completeness of cleaning.
 - 3 The competent person will conduct a thorough visual inspection before there is any final clearing of the cleared or restricted zone. After the final clean-up, a preliminary visual inspection will be conducted by the Owner's Representative.

to ensure that all visible dust and debris has been removed. The Contractor shall provide the Owner's Representative at least 24 hours' notice prior to scheduling inspections. If the Work Area is not visibly clean, as determined by the preliminary visual inspection by the Owner's Representative, the Contractor shall re-clean and decontaminate, until the Work Area passes inspection. Once the criteria for visual inspection has been satisfied, final clearance air samples will be taken and analyzed. Upon notification from the Owner's Representative that work area is visibly clean, the owner's representative will oversee final Clearance testing.

All clearance air samples shall be collected in accordance with Regulatory Guidelines at the discretion of the Owner's Representative, a minimum of three samples per 1,000 SF, one each from the floor, window sill and exterior horizontal surface.

- a. Clearance Guidelines
 - 10 $\mu\text{g}/\text{ft}^2$ Interior floors
 - 100 $\mu\text{g}/\text{ft}^2$ window sills
 - 100 $\mu\text{g}/\text{ft}^2$ exterior horizontal surfaces

The results from the air monitoring and air testing will be submitted to the Owner and the abatement Contractor. Cleaning will continue, if necessary, until these clearance criteria are met. The barriers and signs establishing the containment will not be removed until these final visual clearance criteria have been met.

- 6. Upon notification from the Owner's Representative that lead final clearance samples indicate acceptable clearance levels, dismantle decontamination enclosure systems, remove critical barriers, and thoroughly EPA-vacuum and air the area with trisodium phosphate solution.
- 7. Lead sample results will be reported in terms of micrograms of lead per cubic meter of air (air samples) or micrograms of lead per square foot of surface (air samples). Samples will be collected in accordance with EPA, OSHA, or MSD recommended procedures for the type of sample being collected.
- 8. If any sample indicates contaminant levels higher than the specified clearance levels, full decontamination and clearance procedures including re-sampling shall be performed at Contractor's expense.
- 9. All other trades personnel will be excluded from the work area until the owner gives approval for the area to be reoccupied without respiratory protection and the engineering controls have been demobilized.

Fire and Medical Emergency Response

Each day a tailgate safety meeting shall be held outside of the containment areas for all assigned personnel prior to the start of work. All personnel will be made aware of the site address and the location of any existing on-site fire alarms and the location of the nearest telephone. This information will also be posted at the on-site notice posting board located at the entrance to any lead control area along with the phone numbers for police, fire, ambulance, and the name and location of the nearest emergency medical facility. The abatement Contractor in its submittal package prior to any work must provide this information to the Owner.

In the event of a medical emergency within the control area, the sick or injured person will be decontaminated before removal if the nature of the illness or injury is not life threatening or will not be exacerbated by the decontamination process. If the illness or injury is life threatening, or is likely to be made worse by the decontamination process, then the ill or injured person will be removed immediately without regard to decontamination and medical attention summoned. Illness and/or injuries occurring on the job will be promptly and thoroughly investigated.

In the event of fire, the first person to notice the fire shall alert others within the control area and immediately evacuate. The fire alarm, if present, will be activated and the fire department will be called from the nearest safe place.

A complete first aid kit will be kept on-site for minor injuries.

Disposal of Lead Waste

Suspect lead containing paint residues will be tested to determine whether it is hazardous waste. All suspect hazardous paint chips, dust and other generated waste shall be tested first for total lead or TTLC, and then by the STLC/TCLP leaching test procedures for lead content prior to disposal. All waste characterization will be performed by the Contractor, at the Contractor's expense, and submitted to the Consultant for approval.

All waste generated from this work shall be treated as hazardous waste until STLC/TCLP or TTLC results indicate otherwise. The Contractor is responsible for any disposal of all waste, whether common construction debris or RCRA hazardous waste like paint chips and dust from the abatement process.

Small lead contaminated hazardous waste including water, silt, debris, bags, containers, equipment, and clothing may produce airborne concentrations of lead dust will be collected and placed into MSDOT approved drums for disposal. Each drum will be properly labeled to identify the type of waste and the date the drum was filled.

A uniform hazardous waste Manifest for the small debris from paint chip scraping abatement work will be obtained and properly filled out, by adhering to the following procedures. At the start of the project, the empty container must be in good condition, empty, lockable and have a valid state certification. If the container fails the inspection, the deficiency must be corrected or another container obtained.

When the container is approved, the Contractor will begin a manifest and hold it for up to 90 days. The abatement Contractor will provide information such as job site, contract number and the ultimate disposal site. The container will be marked with the current date as the accumulation start date. Waste may not be stored in an accumulation area for more than 90 days. Other container markings must be in place as required by law.

Lead waste paint dust and chips, restroom fixtures will be properly packaged and loaded into the container, which will be locked at all times except during loading or inspection. RCRA lead waste shall go in DOT approved barrels to be transported by an approved hazardous waste hauler.

Containerized waste will be loaded into an enclosed truck or transport. The enclosed cargo area of the truck will be lined with 6-mil poly sheeting to prevent contamination from leaking or spilled containers.

The personnel loading the lead containing waste will wear protective equipment including overalls, head and foot, coverings, gloves and a respirator.

Characterize packaged waste prior to removal of waste from the site. All waste stream sampling for lead waste generated by the lead abatement Contractor as listed will be completed by the removal Contractor – removal waste stream sampling and reporting.

The general Contractor demolition Contractor shall conduct all debris waste pile sampling prior to disposal of demolition debris created during the project. Debris sampling following the State of California waste stream sampling criteria – construction demolition waste stream sampling and reporting.

All building materials including paint attached, construction debris including lead painted building components, lead removal components, all associated removal debris, ceramic tiles, and restroom fixtures from the abatement shall be tested using the DET MET/OD TTLC and then TCLP, and/or STLC as required for hazardous waste disposal. The collected small debris and paint chips that are to be disposed of by the Contractor will most probably be classified as a hazardous waste. Characterize packaged waste prior to removal of waste from the site.

2.3.5 COST FOR DISPOSAL OF HAZARDOUS WASTE

- A The cost for the correct disposal of all waste of this project shall be included in the Total Base Bid, including the lead abatement waste to be disposed of as hazardous waste based upon TTLC, STLC, and TCLP testing as outlined in this section, and according to CCR 201, 261, and 262. The cost for the disposal as hazardous waste shall include all fees, permits, labor, materials, profit, overhead, waste transfer costs, and all other costs incidental to hazardous disposal.
- B The Contractor shall submit to its approved laboratory for testing, samples of each type of component removed as part of the work of this project. The Contractor's total base bid shall include minimum requirements of the testing of materials referred to in this Section. In addition to these materials, the Contractor's base bid shall include the cost of 10 samples of each type of component that has not removed in the sample decontamination units but will be removed during the project.
- C Any additional TTLC, STLC, and TCLP testing requested by the Owner shall be at cost agreed to between Owner and Contractor. This cost shall be based upon required turnaround time for sample analysis results, and upon type of analysis requested. The Contractor shall provide a minimum of three competitive prices for review by Owner. The Contractor shall apply for payment for additional testing costs under proper change order procedures as defined in the Contract Documents. The acceptance of the application for change order is subject to the review and approval of the Owner.

END OF SECTION II

SECTION III

PCB's / Mercury Containing Light Tubes / Universal Waste Handling, Removing, and Disposal Specification

Scope of Work

This work plan addresses the handling, removing and disposing of the following materials including but limited to:

1. Polychlorinated Biphenyls (PCBs) containing materials in electrical ballasts
2. Mercury containing light tubes
3. General universal waste
4. Other Regulated Materials

This work plan will be put in place if any construction activities takes place around the existing lighting structures that will cause disturbance in association with the lighting. The removal, hauling, and disposal of the referenced materials and all associated activities to complete the project as listed will be conducted at the contractor's expense. All remaining hazardous Other Regulated Materials (ORM) are to be properly removed, transported, recycled, and/or disposed in accordance with all applicable regulations local, state, and federal and these specifications.

The findings from the survey on universal wastes are detailed in Table 3-1. This table provides a comprehensive summary of the universal wastes inventory identified within the survey area.

Table: 3-1 Universal Waste Checklist Project Number: DGS San Diego HazMat Survey Project Name: 345 West Ash Street, San Diego, CA 92101	
Material	345 West Ash Street
Thermostats containing liquid mercury	1
Oil-filled gauges, devices, valves and parts	0
Oil filter units	0
Electrical light ballasts	00
Fluorescent light lamps and bulbs	80
Refrigerant from air conditioning units	3
Refrigerator	1
Water heater	2
Paints or Solvents	90

Definitions

Definitions are those contained in 40 CFR 761

Notifications

The project owner and the on-site inspector shall be given a courtesy notification ten (10) days prior to start of any related work outlined within this specification work plan

References

Code of Federal Regulations (CFR)	
29 CFR 1910.134	Respiratory Protection
29 CFR 1910.104	Accident Prevention Signs and Tags
29 CFR 1910.1000	Air Contaminants
29 CFR 1926.99	Hazard Communication
40 CFR 761	Polychlorinated Biphenyls (PCBs) Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions
40 CFR 171	General Information, Regulations, and Definitions
40 CFR 172	Hazardous Materials Tables and Hazardous Materials Communications Regulations
40 CFR 173	Shipments and Packing
40 CFR 174	Carriage by Rail
40 CFR 175	Carriage by Aircraft
40 CFR 176	Carriage by Vessel
40 CFR 177	Carriage by Public Highway
40 CFR 178	Shipping Container Specification
40 CFR 179	Tank Cars

Submittals

The Consultant's review of submittals shall not relieve the Contractor from the responsibility for complying with contract drawings or specifications unless the Contractor has secured the written approval of the Consultant for all deviations. Consultant's review of submittals shall not relieve the Contractor from responsibility for errors and omissions in the submittals.

Submittals shall contain only those items specified and shall not include items which are not provided for under this contract unless they are clearly marked and/or voided as not being part of this contract. The submittals that are required are as follows:

Prior to Start of Work Activities:

As required, notification in writing of proposed work, with copy to the Owner, the EPA Regional Office, OSHA or OSHA Regional Office, local air pollution agency, and local authority with responsibility for enforcement of occupational health and safety regulations and enforcement of any environmental regulations within jurisdiction in the state in which this project is located.

Submit proof satisfactory to the Owner that all required permits, site locations and arrangements for transport and disposal of PCB containing materials, mercury filled light tubes, universal waste, and Other Regulated Materials (ORM) and general waste and debris have been obtained.

Submit to the Owner for information and approval, a description of the plans for construction of decontamination enclosure systems and for isolation of the work areas in compliance with this specification and applicable regulations.

Submit documentation to the Owner indicating that all employees have had medical examinations and instruction on the hazards of PCB exposure, use of protective clothing, respirator fit tests, entry and exit from work areas, on work procedures and protective measures.

All training, medical examinations, and respirator fit-testing shall conform to Title 8 California CODE OF REGULATIONS (CCR) 208 as well as 40 CFR, Part 763, Appendix C to Subpart E as applicable.

The Contractor shall submit to the Owner, including but not limited to the following:

- a. Weekly work schedule.
- b. Various manufacturers information, including Safety Data Sheets (SDS).
- c. Type and brands of materials for worker protection.
- d. Method of application and materials to be used.
- e. Medical exam results of all employees (OSHA 1910.1001), including chest roentgenogram, pulmonary function and forced expiratory volume at second (Contractor is responsible for the appropriate medical releases).
- f. Test results both personal air monitoring data and air pressure differential between work areas and external air.

- g) Copies of all daily manpower and work logs indicating areas and type of work performed
- h) Copies of all certifications of disposal
- i) Copies of permits
- j) Copies of all OSHA Form 101 or equivalent accident/injury/incident reports

Fall Protection

Scaffolds and man lifts shall be equipped with guardrails and workers provided with the proper fall protection equipment

Freestanding scaffolds shall not extend higher than four times the minimum base dimension. Guardrails, toe boards, and outriggers shall be installed on scaffolds more than six feet in height. Planks shall extend to no more than 12 inches past the end support. Scaffolds and scaffolding shall be in accordance with established standards.

Only approved ladders shall be used inside the regulated areas. No ladder shall be placed directly on areas lined with polyethylene.

The contractor shall supply for approval a written fall protection safety plan.

Hazard Communications

The contractor shall supply for approval a written ongoing hazard communication program. There will be a file of SDS on site at all times for items used on this job site.

Respirator Protection Program

The Contractor shall supply for approval a written respiratory protection program.

Submittal Procedures

Deliver to the Owner point contact two copies of the submittal.

All submittals shall be submitted in hard-copy, three-ring, loose leaf binders, properly indexed with tabs separating each section.

Comply with progress schedule for a timely submission of submittals as they relate to work progress. Coordinate submittal of related items.

Emergency Procedures

All personnel should be briefed that the single emergency telephone number is 911.

Fire:

In the event of a fire, all personnel shall evacuate the area and call the fire department. Personnel shall be briefed to assemble at on-site designated area. The onsite Competent Person shall be responsible for accounting for all employees. There shall be a minimum of two exits designated from the work area.

Medical:

There shall be a minimum of two employees on site with first aid and CPR training to handle.

Life Threatening Injury:

In the event of a life-threatening injury, the injured party shall be removed from the work areas as expeditiously as possible. 911 shall be called to request medical assistance. The injured party removed and decontaminated as much as possible outside. Responding medical personnel shall be advised that the injured may be contaminated with PCB material as appropriate.

Non-Life-Threatening Injury:

In the event of a minor non-life-threatening injury, the injured party shall exit through the decontamination unit following the proper exit decontamination procedures and proceed to medical assistance.

Heat Stress/Heat Stroke:

Heat stress and heat stroke are not expected to be a problem on this job. Cold potable water shall be always available on site.

Hurricane/Earthquake etc.:

In the event of a hurricane warnings or earthquakes, personnel shall secure any loose items outside the building and proceed to a designated evacuation area. Competent person shall account for all employees.

Coordination with Other Trades

Other trades shall be notified that the regulated area is off limits except for emergency situations coordinated with the onsite Competent Person.

Pre-Modernization / Demolition Inspection

Prior to modernization or demolition, the Contractors' Competent Person and industrial hygienist shall inspect all entities suspected of containing and/or contaminated with PCBs. A review of all light tubes will be conducted concurrently. The inspection will involve:

- Ensuring that all electrical current has been cut to electrical fixtures and transformers.
- Identifying and marking number and location of PCB containing electrical ballasts.
- Identifying and marking number and location of light tubes to be removed.
- Identifying the location of all work areas and equipment storage areas.
- Identify the location of waste storage prior to transport from the site.

PCBs, Universal Wastes, Other Regulated Materials (ORM)

- Identified universal wastes shall be appropriately removed, or recycled, or disposed of in accordance with the Department of Toxic Substances Control (DTSC) following strict adherence to the Title 22 of the California Code of Regulations.
- Assumed PCB containing equipment should be removed prior to renovation/demolition. The equipment should be inspected for "No-PCB's" or "PCB Free" labelling during removal. Any unlabeled equipment should be handled and disposed of as PCB containing waste.

- PCB-containing devices should be properly removed or have the oils removed, transported and recycled or disposed of at an approved recycling or waste disposal facility
- PCB use, storage and disposal are regulated by the United State Environmental Protection Agency (USEPA) under the Toxic Substances Control Act (TSCA) and by Part 761, Title 40 of the Code of Federal Regulations (40 CFR Part 761). All materials or wastes that contain PCBs at concentrations of 10 ppm are regulated by TSCA.
- Assumed mercury containing equipment should be removed intact and disposed of by proper recycling prior to renovation/demolition.
- Electronic equipment should be removed intact and properly disposed of prior to renovation/demolition.
- Refrigerant containing equipment should have Chlorofluorocarbons (CFCs) extracted and properly disposed of prior to renovation/demolition.
- All hazardous materials activities must be performed in accordance with all applicable federal, state and local regulations.

DEVICES WITH POTENTIAL HAZARDOUS MATERIALS/OTHER REGULATED MATERIAL (ORM)

All associated devices, oils, liquids, refrigerants, and ORM materials must be handled, transported, and disposed/recycled in an EPA approved facility by persons with proper training in the handling of universal wastes and Hazardous Materials as defined by DTSC, OSHA and the USEPA.

Special Hazard Precautions

When working with PCB containing materials, the following precautions shall always be adhered to:

- PCBs shall not be exposed to open flames or other sources of high temperature since to decomposition by-products may be produced.
- PCBs shall not be heated to temperatures of 100°C (212°F) or higher without approval. Smoking, eating and drinking are not permitted within 10 feet of the PCB control area.

Removal and Disposal of Electrical Ballasts (Only if needed)

If the existing light fixtures will be disturbed or removed, all fluorescent-ceiling fixtures will be checked from all construction areas prior to the first disturbance. The Contractor is required to inspect every ballast in each fixture and visually verify that each ballast is labeled "No PCBs" or is unlabeled and presumed to contain PCBs. Any ballast found during this process containing PCBs will be properly removed and disposed of as outlined in this specification. Prior to removal of the electrical ballasts, trained personnel shall dismantle the electrical fixtures, if they are being taken so as not to cause any spills of PCB containing materials.

PCB Containing Electrical Ballasts PCB containing electrical ballasts shall be carefully removed and packaged separately by placing in DOT approved containers. The use of open top 55-gallon drums with lid and lock band is recommended. A start date must be annotated on a label at the time the first ballast is placed in a drum. When the drums have been filled, the removers will contact the owner point of contact and schedule a time to have a manifest signed and have the drums removed from the site. The containers shall be clearly labeled as containing PCB materials, manifested and transported to disposal at a permitted facility.

Examine each ballast to determine if oil has leaked, as identified by the presence of yellow oil or black tar like material on the outside of the ballasts. Any leaking PCB-containing ballasts or transformers shall be wrapped and sealed in 6-mil plastic disposal bags and placed in a separate steel drum or other approved container. Each disposal drum or container will have a sufficient amount of oil-absorbent material placed in the bottom to absorb any oil from ballasts that are leaking or may leak during transport. Connect wires as close as possible to the ballasts. Do not bend back ends of ballasts. All personal protective clothing contaminated with PCB shall be disposed of accordingly.

Mercury Recommendations:

Fluorescent Bulbs and High-Intensity Flood Lights:

- All mercury-containing fluorescent bulbs and high-intensity discharge HID lamps, including flood lights, should be carefully removed to prevent breakage. These lamps can release mercury vapor if they are broken, posing a risk to both human health and the environment. It is crucial to wear appropriate personal protective equipment (PPE), such as gloves and eye protection, when handling these items. Additionally, facilities should provide employees with training on the safe removal and handling of mercury-containing lamps.
- Packaging: Use containers designed specifically for fragile bulbs, such as fiberboard or cardboard boxes with dividers to prevent movement during transport. Each container should be properly sealed, labeled as "Universal Waste – Mercury-Containing Lamps," and stored in a secure, ventilated area.
- Disposal: Dispose of all mercury-containing lamps according to universal waste regulations. In most jurisdictions, this includes following the guidelines outlined in California Code of Regulations, Title 22, Division 4, Chapter 23. Facilities should partner with an EPA-certified recycler that specializes in the handling and recycling of mercury-containing lamps to ensure compliance and environmental safety.

Thermostats, Timers, Pressure Gauges, and Switches:

- Devices such as thermostats, timers, pressure gauges, and switches that may contain mercury should be treated as mercury-containing universal waste. During removal, these devices must be handled with caution to prevent breakage or damage that could lead to a mercury spill. Personnel should be equipped with suitable PPE, such as chemical-resistant gloves and safety goggles, and should receive training on proper removal techniques.
- Packaging: Place all suspect devices in leak-proof, rust-resistant containers designed for hazardous materials. It is essential to label each container accurately,

indicating that it contains “Universal Waste – Mercury-Containing Devices.” Secure storage of these containers in a designated area, away from high-traffic zones, reduces the risk of accidental damage.

- All mercury containing fluorescent bulbs and high-intensity flood lights should be carefully removed, packaged, and disposed of as mercury containing universal waste.
- Remove, package, and dispose of all susceptible thermostats, timers, pressure gauges, and switches as mercury containing universal waste.

Draining Refrigerant from Refrigerated Units and HVAC Systems Prior to Demolition

Before the demolition of refrigerated units or HVAC systems, it is important to safely drain and recover all refrigerants to comply with environmental regulations and to protect the environment and worker safety. The following steps may be taken to safely drain refrigerants.

- Conduct a thorough inspection of all refrigerated units and HVAC systems scheduled for demolition to identify the type and quantity of refrigerants present. Prepare a demolition plan that includes refrigerant recovery as a key task. Ensure that all technicians handling the equipment are EPA-certified and trained in refrigerant recovery procedures as required under Section 608 of the Clean Air Act.
- Use EPA-approved recovery machines designed for the specific type of refrigerant being drained. The equipment should be capable of achieving the required evacuation levels based on the refrigerant type and equipment size. Properly maintained and regularly calibrated recovery equipment is essential to ensure efficiency and compliance.
- Before starting the recovery process, isolate the refrigerant lines by shutting off all relevant valves and disconnecting the power supply to the equipment. This helps to prevent an accidental activation of the unit and potential refrigerant leaks.
- Connect the recovery machine to the unit's service ports and initiate the recovery process. Monitor the recovery machine's gauges to ensure that the refrigerant is being properly evacuated and stored in a certified recovery cylinder. Follow industry best practices and manufacturer guidelines for each type of refrigerant and equipment to achieve full recovery.
- It is illegal to vent refrigerants into the atmosphere due to their harmful environmental effects. Ensure that all recovery procedures adhere to EPA, State, and local regulations to prevent intentional or accidental releases.
- Once the refrigerant is fully recovered, transfer it to EPA-approved storage containers. Label the containers with relevant information, such as the type and quantity of refrigerant, to facilitate safe handling, transportation, and disposal. Verify that the storage containers are in good condition and have the necessary safety caps and labels.

- After the recovery process, perform a final leak check on the unit to confirm that no refrigerant remains in the system. This step is crucial to prevent unintended releases during the demolition phase.
- Maintain accurate records of the refrigerant recovery process, including dates, quantities recovered, types of refrigerants, and disposal methods. These records are required for demonstrating regulatory compliance.
- Transport the recovered refrigerant to an EPA-certified recycling or disposal facility. Recycling facilities can reclaim the refrigerant to meet purity standards, allowing it to be reused in other applications. For refrigerants that cannot be reclaimed, ensure that they are disposed of safely at a facility approved for handling hazardous substances.
- Communicate with the demolition team to confirm that all refrigerants have been fully drained and the units are safe for dismantling. Provide documentation verifying that the refrigerant recovery has been completed according to regulatory standards.

Draining and Removal of Generators and Transformers

- Conduct a thorough assessment of the generators and transformers to identify all potentially hazardous materials, such as oil, coolants, lubricants, and Polychlorinated Biphenyls (PCBs). Establish whether the transformer contains PCB-contaminated oil or non-PCB oils, as this will affect the handling and disposal procedures.
- Confirm that all activities comply with local, state, and federal regulations for hazardous materials handling and disposal. This includes obtaining any required permits and following guidelines set by the EPA, DOT, OSHA, CAL OSHA, DTSC, State, and local regulatory agencies.
- Disconnect all power sources from the generators and transformers to avoid electrical hazards. Isolate the units by disconnecting them from all electrical connections and grounding them to ensure the safety of personnel working on the draining and removal.
- Generators and transformers often contain fluids such as oil or coolants that need to be drained before removal. Follow these steps:
 - Use Spill Containment Measures. Set up spill containment measures, including using spill pans, absorbent materials, and secondary containment barriers, to prevent spills and leaks from contaminating the worksite.
 - Open the designated drainage valves or ports and use pumps if necessary to drain the fluids into approved containers. Ensure that the containers are clearly labeled, compatible with the fluids being collected, and meet the standards for hazardous waste storage. Handling of PCBs, special containers rated for hazardous waste must be used.
 - Seal and Label Containers. After draining, securely seal all containers and label them with the contents, date, and any relevant safety warnings.

Handling and Removal of Units

- On the fluids are drained, the physical removal of generators and transformers can proceed

- Use Proper Lifting Equipment—Generators and transformers are heavy and may require specialized lifting equipment—use cranes, forklifts, or hoists with trained operators to ensure the safe removal of these units
- Inspect for Residual Fluids—Conduct an inspection of the units to check for any remaining residual fluids or contamination. If residues are found, conduct additional draining or cleaning as needed before transport
- Package the drained units securely for transport to prevent movement or shifting during transit. Depending on their condition and contamination level, the units may need to be transported to a recycling facility or a hazardous waste disposal site. If the generators or transformers contain PCB-contaminated materials, they must be transported following EPA's Toxic Substances Control Act (TSCA), DOT, DTSC, State and local guidelines
- After the removal of generators and transformers, clean and decontaminate the site to remove any traces of oil or hazardous substances—use absorbent materials, spill response kits, and approved cleaning agents. Collect and dispose of all cleaning materials following hazardous waste regulations
- The drained fluids, including oil or coolant, should be disposed of or recycled at an EPA-approved facility. Non-PCB oils may be recycled, while PCB-contaminated fluids must be disposed of at a facility certified for PCB waste
- Maintain accurate records of all activities, including fluid volumes drained, transport documentation, disposal certificates, and any safety measures taken. This documentation should be retained for regulatory compliance
- Ensure that all personnel involved in draining and removing generators and transformers receive proper training on the handling of hazardous materials and emergency procedures in case of spills or accidents. Conduct periodic safety briefings and review site-specific hazards

Personnel Requirements for Handling Hazardous and Regulated Materials

Only personnel who have received **OSHA HAZWOPER 40-hour specialized training** in the safe handling, management, and disposal of **PCB-containing materials, universal wastes, refrigerants, and other regulated materials (ORMs)** shall be permitted access to designated work areas. The training program must be developed and conducted by a **competent person** to ensure full adherence to all relevant regulatory standards. This training program must cover the following critical areas:

1. Personnel must be trained to identify various hazardous materials, including PCBs, universal waste (e.g., batteries, fluorescent lamps, mercury-containing devices, refrigerants, and other regulated substances). The training should cover the specific health risks, environmental impacts, and safety considerations associated with each type of material.
 - **PCB-Containing Materials:** Personnel must be trained to recognize and understand the hazards associated with Polychlorinated Biphenyls (PCBs), including their toxicological effects and environmental risks. The training should include recognizing common PCB-containing equipment, such as transformers, capacitors, ballasts, and other electrical components.
 - **Universal Wastes:** Training should cover the identification of universal wastes, such as batteries, fluorescent lamps, mercury-containing devices,

electroni  waste, e-waste, and any other universal waste identified by the Department of Toxic Substances Control (DTSC) or equivalent regulatory bodies.

- Refrigerators: Personnel must be familiar with different types of refrigerants e.g., CFCs, HCFCs, and HFCs and their environmental impacts. Emphasis should be placed on the hazards associated with exposure to these substances, such as asphyxiation and chemical burns.
 - **Other Regulated Materials (ORMs):** Personnel should be trained in the identification and handling of additional regulated materials, including but not limited to hazardous oils, coolants, and contaminated soils or debris.
2. Personnel should receive specific instructions on the selection, use, and maintenance of PPE required for handling hazardous materials. This training should include:
 - Proper selection of gloves, safety goggles, foot covers, chemical-resistant clothing, and respiratory protection.
 - Correct procedures for donning and doffing PPE to avoid cross-contamination.
 - Maintenance, inspection, and storage of PPE to ensure ongoing protection.
3. Detailed decontamination procedures must be covered, including the safe removal and disposal of contaminated clothing, proper use of decontamination stations, and handwashing protocols to reduce the risk of exposure to hazardous substances.
4. Training must include a thorough overview of all relevant OSHA, CAL-OSHA, and EPA regulations pertaining to the safe handling, storage, transportation, and disposal of PCB-containing materials, universal wastes, refrigerants, and other regulated materials. This should include:
 - OSHA's Hazard Communication Standard (29 CFR 1910.1200), Personal Protective Equipment Standard (29 CFR 1910.132), and Respiratory Protection Standard (29 CFR 1910.134).
 - EPA's Universal Waste Rule and Section 608 of the Clean Air Act.
 - CAL-OSHA-specific regulations for handling hazardous materials in California.
5. Personnel must be trained on emergency response protocols for handling spills, leaks, or accidental releases of hazardous materials. This includes:
 - Procedures for containing and cleaning up spills using approved spill response kits.
 - Evacuation plans, first aid for chemical exposure, and the use of emergency showers and eyewash stations.
 - Incident reporting and documentation processes for regulatory compliance.
6. Establish clear access control protocols to limit entry to designated work areas. Personnel should be aware of entry and exit procedures, signage indicating restricted areas, and requirements for Surveillance Personnel entering hazardous zones. Surveillance Personnel should be provided with guidelines for wearing minimum PPE and limiting time spent in these areas.
7. The training must cover the identification and mitigation of health and safety risks specific to hazardous and regulated materials. Personnel should be trained to recognize symptoms of exposure, understand the importance of medical surveillance, and follow procedures for reporting health concerns.

The Contractor is responsible for taking all necessary precautions to protect employees from exposure to hazardous materials. Employees must utilize appropriate Personal Protective Equipment (PPE) to safeguard against risks associated with handling hazardous substances. The Contractor shall ensure that all required PPE is provided, maintained, and worn consistently by all personnel in designated work areas. Each worker shall be provided with the appropriate personal protective equipment (PPE), as required by OSHA Regulations, PPE shall include, but not be limited to, the following:

- ✓ Disposable chemical resistant coveralls
- ✓ Chemically resistant gloves over nitrile disposable gloves
- ✓ Disposable boot covers
- ✓ Full-face cartridge respirator
- ✓ Eye protection
- ✓ Handpiece and Eye Wash Stations

Execution of Removal PCB Ballast, PCB Transformers, Fluorescent Light Tubes

Supply down and look out electrical power to all work areas as necessary. The Contractor shall provide temporary power and lighting and ensure safe installation of temporary power services and equipment as specified in applicable electrical code requirements.

The Contractor shall use a California licensed electrician to isolate all electrical sources from lighting fixtures, emergency lighting, switches, gauges, pumps, vacuums, mechanical equipment, etc. prior to removal of ballast's, light tubes, oils, fluids, etc. Isolation and disconnect of any other equipment/system to a room/disconnect shall be the responsibility of the Contractor.

Ballast having labels that the words "NO PCBs" or labels that similar words having the same meaning, may be disposed of in the light fixture. All other ballast, unlabeled PCB-containing ballasts and transformers, regardless of age, will be assumed to contain PCB. Ballast containing, or assumed to contain, PCB may be removed from mounted light fixtures, or the entire light fixture may be removed and taken to a ballast removal area. Floor covering requirements must be met if ballast is removed from mounted fixtures, and ballast shall not be dropped, trodden, or miss handled. Segregate materials shall be segregated based on constituent, condition and proposed disposal. Recycling point. All PCB-containing ballasts and transformers will be removed and placed into 55-gallon steel drums or other DOT-approved containers appropriately labeled in accordance with EPA, DTSC and DOT regulations.

Establish a designated staging area for temporary placement of hazardous materials. Cover the floor with one 1/4" layer of 6-mil plastic sheeting as a drop cloth. Taped down. The sheeting shall be sealed at the joints and shall extend 3 feet beyond the work area. Damaged, soiled, or torn sheeting shall be resealed before ballast removal work continues or resumes. The purpose of the sheeting is to contain spills.

Removal of Leaking Ballast (only if needed) The Contractor shall remove lamps from fixtures. Lamps shall remain intact, unbroken, and shall be placed carefully into cardboard containers designed to hold lamps preferably obtained from the manufacturer or lamp recycling facility. Special care shall be taken not to break tubes during removal, handling and transport.

The Contractor shall use EPA vacuum and thoroughly decontaminate any areas where lamps are accidentally broken.

Ballast removal shall be immediately discontinued if any sign of black tar-like or yellow oil-like substances are discovered on a ballast, light fixture, or cover. The Contractor shall don a Ty-Vek suit, along with the rubber gloves and eye protection before continuing work. Light fixtures, covers, and ballast with the black tar-like substance shall be scraped and wet wiped with an approved solvent until clean and no visible signs of the tar-like substance remain. These solvents must be submitted, for approval, to the owner prior to use.

All precautions shall be taken to prevent PCB spills/leakage into the environment. In the case of a PCB spill and/or leakage the Contractor shall immediately notify the owner. If the spill is estimated to be in excess of one gallon, the local fire department and county environmental compliance department shall also be immediately notified. A PCB spill kit shall always be kept on-site in the immediate vicinity of PCB work areas. Personnel trained in managing and controlling PCB spills/leakage shall undertake the handling of such situations.

In case of PCB spill and/or leak the Contractor shall also:

Roll off an area around the edges of a PCB leak or spill and post a "PCB Spill Authorized Personnel Only" caution sign, immediately transfer leaking items to a drip pan or other container, initiate cleanup of spill as soon as possible, but no later than 8 hours of its discovery, and properly contained and disposed of as solid PCB waste.

Any and all cleanup shall be documented in records of decontamination in accordance with applicable cleanup rules and regulations.

Disposal

Disposal of oil or tar-like substance cleaning materials. The remover shall place all tar-like substance residue and materials with the tarlike substance on them such as Ty-Vek suits, disposable scrapers, rags, and floor covering in a separate steel drum. The external surface of all drums, lids, and lock bands shall be thoroughly cleaned of all tar-like substances, labeled and sealed.

Disposal of The Drums. Arrange for the transport of all properly containerized PCB-containing ballasts to an EPA-approved recycling/disposal facility. The Contractor shall comply with all local state and federal agencies as it relates to the disposal of the PCB drummed materials. The drums containing PCB ballast and those containing rags, toiles, residue, etc. will be transported and properly disposed of as PCB waste.

Disposal of Fluorescent and Other Universal Lamps - Only if needed (light Tubes)

The scope of work for the abatement contractor includes the removal and recycling of all fluorescent lamps, mercury vapor bulbs, and high intensity discharge HID bulbs from lighting fixtures. Fluorescent lamps, mercury vapor bulbs, and HID bulbs shall be removed prior to starting demolition, properly packaged to prevent breakage, and transported intact to an EPA-approved recycling facility. Contractors responsible for the removal and recycling of the fluorescent lamps, mercury vapor bulbs, and HID bulbs shall handle and manage them in accordance with all local, state, and federal regulations.

All fluorescent-ceiling fixtures will be checked from all construction areas prior to the first disturbance. All the light tubes will be carefully removed from the fixture as not to break the tubes and set aside in a pre-approved secured area prior to disposal. All mercury-containing light tubes will be properly removed, stored, and disposed of following all local, state, and federal guidelines. Containers for disposal of waste of lamps fluorescent lamps all be pre-approved by the consultant.

- Carefully remove lambs and bulbs from fixtures. Lambs and bulbs should remain intact, unbroken, and should be carefully placed into cardboard containers designed to hold them preferably original boxes obtained from the manufacturer or special boxes obtained from a lamb recycler.
- Broken lambs and bulbs should still be recycled whenever, if they are not acceptable to the recycling facility, they must be evaluated to determine if they are hazardous waste. Remove and discard residues from broken lambs and bulbs promptly. Personnel cleaning up spills should have appropriate training, cleanup equipment, and wear appropriate personal protective equipment. Acceptable storage for broken, damaged, or leaking lambs and bulbs include a closed 55-gallon steel drum or a closed fiberboard drum.
- Store boxed lambs and bulbs in a secure area and limit access to personnel qualified to handle them.

- Contact an EPA-approved lamp recycler and arrange for transport of the properly packaged and labeled lamps and bulbs to the recycler.
-
- A manifest must be prepared when fluorescent lamps and PCB waste and other universal waste/ORM materials outlined are offered for transport for on-site treatment, storage, and recycling. The waste manifest fulfills requirements for a material's Bill of Lading. Waste Manifests shall be properly completed by the Contractor for each waste shipment and shall list each transportation container including any non-hazardous waste or hazardous materials shipped. The manifest shall contain all information required by applicable federal, State, and local hazardous waste or materials regulations. The Contractor shall provide all data required for waste transportation, treatment, and recycling, and for completion of a hazardous waste or material generator report as required by the regulatory agency of jurisdiction.
 - A shipping label containing the appropriate address information shall be prepared and placed on top of the shipping drum/container and covered with transparent adhesive tape.
 - Recycling of all selected materials shall be in accordance with all federal, State, and local regulations.
 - The Contractor and the Transporter must comply with the DOT Emergency Response Communication Standards applicable to the shipment of hazardous materials.
 - Submit copies of the original shipment records documenting proper transport, recycling, and proper disposal of any non-recycled components to the owner upon project completion.

Mercury-Containing Thermostats and Electrical Switches (if discovered during demolition activities)

The Contractor shall inspect every thermostat and electrical switch for the presence of liquid mercury. Thermostats and electrical switches that contain mercury shall be carefully removed in accordance with the EPA - Hazardous Waste "Universal Waste" Guidance Documents and regulations, from their mounted position, wrapped to prevent breakage, and placed in a sealable, rigid, labeled container with absorbent material in the bottom. The Contractor shall arrange to have the mercury properly transported to and recycled by an authorized recycling facility. Provide to the owner, copies of shipping papers, manifest, and documentation demonstrating that the mercury has been properly transported and delivered to an approved recycling/disposal facility upon project completion. All mercury containing materials will be properly removed, stored, and disposed of following all local, state, and federal guidelines and current regulations.

Nickel-Cadmium, Lead-Acid, and Other Metal-Containing Batteries, Nuclear Power Source, Emergency Lighting The Contractor shall check all batteries in emergency lighting fixtures, emergency exit signs, generators and battery charging systems, and other electrical equipment or components for batteries that may contain heavy-metals. This also includes any emergency lighting that has a nuclear power source. All batteries shall be removed in accordance with the EPA - Hazardous Waste "Universal Waste" Guidance

Documents and regulations and placed in a separate sealable container and delivered to an approved recycling/disposal facility. Provide to the owner documentation demonstrating that all batteries containing hazardous components have been properly removed, transported, and disposed upon project completion following all local, state, and federal guidelines and current regulations.

DEVICES WITH POTENTIAL HAZARDOUS MATERIALS/OTHER REGULATED MATERIAL (ORM)

All associated devices, oils, liquids, refrigerants, and ORM materials must be handled, transported, and disposed/recycled in an EPA approved facility by persons with proper training in the handling of universal wastes and hazardous materials as defined by DTSC, OSHA and the US EPA.

The Contractor shall remove from the premises all regulated and general waste following all removal, transport, and disposal codes and regulations for each of the waste materials encountered. Transport all property containerized lamps, ballasts, and transformers to an approved recycling facility. The Contractor shall be responsible for determining and complying with all current applicable regulations to waste handling and transport of PCB-containing ballast's, transformers, mercury-containing lamps and ORMs. Proper personal protective equipment (PPE) will need to be in place during the cleanup and removal of human waste caissons and rotted woods.

The original waste shipment record documenting proper transport, recycling, and incineration of unrecycled components like PCB-containing solids and liquids shall be completed and submitted to Owner's Representative upon project completion. No hazardous waste will be stored at the project site for more than 90 days from the date of first accumulation.

RECYCLING OF NON-HAZARDOUS AND HAZARDOUS MATERIALS

All materials regardless of hazard classification shall be manifested for recycling and shall be recycled in accordance with all applicable federal, State, and local regulations.

- Contact EPA, State, and local authorities to determine specific material recycling requirements.
- The recycler will be required to properly store and secure waste at all times. No debris shall be left at the site or in uncovered or unlocked trucks or dumpsters.

Recycling of Hazardous Liquid or Solid Wastes

- Comply with federal, RCRA, State, DTSC, and local regulations.
- Retain all project documents provided by the recycling site.
- At completion of hauling and recycling of each load submit a copy of the Uniform Hazardous Waste Manifest to the Owner.

END OF SECTION III

SECTION 02 08 00.2

HAZARDOUS MATERIALS ABATEMENT SPECIFICATIONS

FORMER SAN DIEGO TRANSAMERICA BUILDING (804)

**1301 STATE STREET,
SAN DIEGO, CALIFORNIA 92101**

OCTOBER 25, 2024

Existing building is considered dilapidated and unsafe and State Representatives will be unable to enter and perform observation or clearance duties. The entire building at 1301 State Street and its contents are to be considered hazardous waste. Removal and disposal of hazardous materials shall comply with this Specification Section.

Containment and demolition means and methods shall comply with State and local regulations, including but not limited to, the City of San Diego Air Pollution Control District.

SECTION 02 08 00.2 ASBESTOS

ASBESTOS ABATEMENT

PART 1 – GENERAL

1.1.0 STIPULATIONS

A The procedures specified herein are guidelines for minimum performance. The Contractor is responsible for their own methods of operations and conformance to regulatory codes, rules, and guidelines. The Contractor is required to obtain all permits/licenses and approvals to perform the work, including any rights to use patented systems.

1.1.1 SCOPE OF WORK

A Work included. The licensed Contractor shall furnish all labor, employee training, materials, services, permits and agreements, insurance specifically covering the handling and transportation of Asbestos-Containing Material, Asbestos-Containing Construction Material and Asbestos-Containing Waste Material, and equipment which is specified, shown, or reasonably implied for abatement or disturbance of the materials included for abatement and all other work in accordance with the latest regulations from the U.S. Environmental Protection Agency (EPA), the Occupational Safety and Health Administration (OSHA), the State of California Division of Occupational Safety and Health (DOS), San Diego County Air Pollution Control District (APCD) and any other applicable federal, state and local government regulations.

B The scope of work for this project includes the removal and disposal of the identified asbestos-containing materials (ACMs) and asbestos-containing construction materials (ACCMs) as listed in Table 1-1, 1-2 and 1-3. These materials were identified in the Titan Environmental Solutions Hazardous Materials report, dated November 7th 2023 and in the State of California, DGS, Environmental Safety and Health and Operations Program (ESOP) Hazardous Materials Investigation Memorandum report, dated October 11th, 2007.

C Contractor shall submit an Abatement Work Plan which describes specifically how the abatement work is to be completed. At a minimum the Abatement Work Plan shall address work area preparation, work practices, decontamination unit location, respiratory protection and disposal. Approval of the Work Plan must be obtained through the Owner prior to the start of work. Procedures outlined in the Abatement Work Plan must be followed throughout the abatement phase. Any changes in the Abatement Work Plan must obtain prior approval from the Owner.

Table 1-1: Identified ACMs
Titan Environmental Solutions
November 7, 2023

HA No.	Sample No.	Sample Locations	Material Description	Class.	Material Location(s)*	Friable/ Non-Friable	Condition (G, D, SD)	Estimated Quantity*	Asbestos Analytical Results	Cat.
01	1107-01-01 1107-01-02 1107-01-03 1107-01-04 1107-01-05 1107-01-06 1107-01-07	N 1/2 all 1/2 End, N 1/2 all 1/2 End, N 1/2 all 1/2 End, N 1/2 all, N 1/2 all E End, N 1/2 all E End, N 1/2 all E End	Tan Exterior Stucco	Surf	1/2 in Exterior 301	1/2	G	6,000 S	1/2 Crystotile	RACM
02	1107-02-08 1107-02-09 1107-02-10 1107-02-11 1107-02-12 1107-02-13 1107-02-14	1/2 all N End, 1/2 all N End, 1/2 all S End, S 1/2 all 1/2 End, S 1/2 all 1/2 End, S 1/2 all 1/2 End, S 1/2 all	Multi-Color Exterior Stucco	Surf	1/2 in Exterior 1301	1/2	G	12,000 S	1/2 Crystotile	RACM
03	1107-03-15 1107-03-16 1107-03-17 1107-03-18 1107-03-19 1107-03-20 1107-03-21	E 1/2 all N End, E 1/2 all N End, E 1/2 all N End, E 1/2 all S End, E 1/2 all S End, E 1/2 all S End, E 1/2 all S End,	Tan Gray Cinder Block	Misc	1/2 in Exterior 1301	N	G	1,000 S	1/2 Crystotile	Cat I ACM
04	1107-04-22 1107-04-23 1107-04-24 1107-04-25 1107-04-26 1107-04-27 1107-04-28	E 1/2 all N End, E 1/2 all N End, E 1/2 all N End, E 1/2 all, E 1/2 all S End, E 1/2 all S End, E 1/2 all S End	Tan Gray Cinder Block Mortar	Misc	1/2 in Exterior 1301	N	G	1,000 S	1/2 Crystotile	Cat I ACM

Legend

1/2 A 1/2 Homogenous Material

N 1/2 North, E 1/2 East, 1/2 West, S 1/2 South, S 1/2 Square Feet, L 1/2 Linear Feet, ND 1/2 None Detected

Classification 1/2 Class 1/2 Miscellaneous, Surf 1/2 Surfing, TSI 1/2 Thermal System Insulation

Condition 1/2 G 1/2 Good, D 1/2 Damaged, SD 1/2 Significantly Damaged

Categories 1/2 Cat 1/2

- Cal 1/2 OS 1/2 A 1/2 ACCM 1/2 Asbestos Containing Construction Materials, ACM 1/2 Asbestos Containing Materials - Class I, Class II, Class III, Class IV
- Presumed Asbestos Containing Material 1/2 PACM 1/2 means thermal system insulation and surfacing material found in buildings constructed no later than 1980
- NES 1/2 AP 1/2 Cat I 1/2 Category I Non-friable ACM, Cat II 1/2 Category II Non-friable ACM, RACM 1/2 Regulated Asbestos Containing Materials

The locations and quantities provided are estimates based solely on accessible materials within the survey area. There may be additional locations and quantities of asbestos-containing materials present at the Subject Property.

In accordance with 40 CFR Section 61.11 and US EPA Asbestos Abatement Control Number C112, if the amount by visual estimation appears to be less than 10 percent, the owner or operator may assume the amount to be greater than 1 percent and treat the materials as asbestos-containing material, or require verification of the amount by point counting. If a result obtained by point count is different from a result obtained by visual estimation, the point count result will be used. Please note the Certified Asbestos Consultant will assume any material that is 1/2 analyzed via PLM and not verified by point count as an Asbestos Containing Material (ACM).

The third-party laboratory will discard all submitted samples after thirty (30) calendar days following receipt of the samples. Any additional analysis must be requested within thirty (30) days by the Client.

Table 1-2: Identified ACMs
Titan Environmental Solutions
November 7, 2023

HA No.	Sample No.	Sample Locations	Material Description	Class.	Material Location(s)*	Friable/ Non-Friable	Condition (G, D, SD)	Estimated Quantity*	Asbestos Analytical Results	San Diego County APCD Categories
N/A	N/A	Exterior Roofing Materials	Troughout Roof	Misc	Troughout Roof	No	N/A	Unknown	Assumed ACM	Cat I ACM
N/A	N/A	Interior Walls, Floors and Ceilings	Troughout Interior of Building	Misc	Troughout Interior of Building	No	N/A	Unknown	Assumed ACM	Cat I ACM

Legend

A Homogenous Area

N North, E East, S South, S Square Feet, L Linear Feet, ND None Detected

Classification Class Miscellaneous, Surface Surfacing, TSI Thermal System Insulation

Condition G Good, D Damaged, SD Significantly Damaged

Categories Cat I

CalOSHA ACCM Asbestos Containing Construction Materials, ACM Asbestos Containing Materials,

NESAP Cat I Category I Non-Friable ACM, Cat II Category II Non-Friable ACM, RACM Regulated Asbestos Containing Material

Locations and Quantities are estimates based on accessible materials located in the survey area only. Additional locations and quantities may be present at the Subject Property.

In accordance to 40 CFR 61.11 and US EPA Asbestos Liability Determination Index Control Number C112, if the amount by visual estimation appears to be less than 10 percent, the owner or operator may assume the amount to be greater than 1 percent and treat the materials as asbestos-containing material, or require verification of the amount by point counting. If a result obtained by point count is different from a result obtained by visual estimation, the point count result will be used.

Please note the Certified Asbestos Consultant will assume any material that is not analyzed via PLM and not verified by point count as an Asbestos Containing Material (ACM).

Table 1-3: Identified ACMs
Environmental Safety Health and Operations Program (ESHOP) Memorandum Report
Conducted October 11, 2007

Material #	Material Type	Result
001	Layer 1 - Tan 9"x9" Floor Tile w/ Mastic Backing	1-71
	Layer 2 - Dark Beige 9"x9" Floor Tile w/ Mastic Backing	1-21 Asbestos Detected in Tile
002	Light Beige 9"x9" Floor Tile w/ Mastic Backing	1-21 Asbestos Detected in Tile
006	Light Beige 9"x9" Floor Tile w/ Mastic Backing	1-11 Asbestos Detected in Tile w/ Mastic
007	Dark Tan 9"x9" Floor Tile w/ Mastic Backing	1-11 Asbestos Detected in Tile
008	Cream Beige 9"x9" Floor Tile w/ Mastic Backing	1-11 Asbestos Detected in Tile w/ Mastic
010	Black Base Cove w/ Adhesive Backing	111 Asbestos Detected in Adhesive Backing
012	Brown Base Cove w/ Adhesive Backing	111 Asbestos Detected in Adhesive Backing
013	12"x12" Wall Tile w/ Adhesive Backing	111 Asbestos Detected in Adhesive Backing
014	Plaster Texture, Interior	1-21 Asbestos Detected in Texture
016	Sheetrock Joint Compound Texture	111 Asbestos Detected in Texture
018	Dark Beige 9"x9" Floor Tile w/ Mastic Backing	1-11 Asbestos Detected in Tile w/ Mastic
	Asphalt Roofing Materials	Assumed Asbestos-Containing

D. Contractor is required to verify the scope of work prior to commencing work, including quantities of materials to be removed, and to determine the degree of difficulty in removing the identified materials.

E. Applicable Publications. The publications listed below form a part of these Specifications to the extent referenced. The publications are referred to in the text by the basic designation only.

1. Code of Federal Regulations (CFR) Publications	
29 CFR 1910.1001	Asbestos
29 CFR 1926.1101	Asbestos
29 CFR 1910.1200	Hazard Communication
29 CFR 1910.1020	Access to Employee Exposure and Medical Records

10/2/2008 ARDO'S MATERIALS ABATEMENT SPECIFICATION

- 29 C.R. 1910.132 General Requirements - Personal Protective Equipment
- 29 C.R. 1910.133 Eye and Face Protection
- 29 C.R. 1910.134 Respiratory Protection
- 29 C.R. 1910.135 Safety Regulations for Accident Prevention, Signs and Tags
- 29 C.R. 1910.136 Confined Space
- 29 C.R. 1910.137 Lockout/Tagout
- 40 C.R. 61, Subpart A General Conditions
- 40 C.R. 61, Subpart M National Emission Standards for Asbestos
- 40 C.R. 61.102 Standard for Asbestos Disposal for Manufacturing, Demolition, Renovation, Stripping and Abatement Operations
- 29 American National Standard Institute/American Industrial Hygiene Association (ANSI/AIHA) Publications
 - 92-2006 Fundamentals Governing the Design and Operation of Local Exhaust Systems
- 39 American National Standard Institute/American Society of Safety Engineers (ANSI/ASSE) Publications
 - 88-2-201 Practices for Respiratory Protection
- 99 National Fire Protection Association (NFPA)
 - Standard 90A Installation of Air Conditioning and Ventilation Systems, 2010 Edition
- 99 U.S. Environmental Protection Agency (EPA)
 - Publication No. 600/8-02 Guidance for Controlling Asbestos-Containing Materials in Buildings, June, 1980
- 69 American Society for Testing and Materials (ASTM) Publications
 - E 89-82 Safety and Health Requirements Relating to Occupational Exposures to Asbestos
 - P 189 Safety Regulations for Encasulants for friable Asbestos-Containing Materials
- 79 National Institute of Occupational Safety and Health (NIOSH) Publications
 - Manual of Analytical Methods, 2nd Edition, Volume 1
 - Method 7000 Asbestos and Other Fibers by PCM
- 89 Underwriters Laboratories, Inc. (UL) Publications
 - 86-77 (R1982) Test Performance of High Efficiency Particulate Air Filter Units
- 99 California Code of Regulations (CCR) Publications
 - 8 CCR 129 Construction Safety Orders-Asbestos
 - 8 CCR 1208 General Industry Safety Orders-Asbestos
 - 8 CCR 1100 Respiratory Protective Equipment
- 109 San Diego County Air Pollution Control District (APCD)
 - Rule 1206 -Asbestos – Demolition and Renovation

10202000A CARDOUS MATERIALS ABATEMENT SPECIFICATION

- L** Asbestos (CCR definitions) Means fibrous forms of various hydrated minerals including Chrysotile, fibrous serpentine, Crocidolite, fibrous Riebeckite, Amosite, fibrous Tremolite, fibrous Actinolite, and fibrous Anthophyllite
- M** Asbestos-Containing Material (ACM) Material composed of asbestos of any type in an amount greater than one percent (1%) by weight, either alone or mixed with other fibrous or non-fibrous materials
- N** Asbestos-Containing Construction Material (ACCM) According to Title 8, Section 1029, asbestos-containing construction material means any manufactured construction material that contains more than 0.1% asbestos by weight
- O** Asbestos-Containing Waste Material (ACWM) Means any waste that contains or is contaminated with friable asbestos waste, RACM generated by a facility. ACWM includes, but is not limited to, RACM stripped or removed from a structure, facility, or component, any materials, soils, and/or debris contaminated with RACM including equipment and clothing, RACM waste and filters from control devices (Pollution Control Devices), particulate asbestos material, RACM slurries bags, packages and containers that previously contained RACM
- P** ACWM Disposal Site Means any location where ACWM has been abandoned, buried, covered, deposited, or stored. This term includes locations with ACWM where the original source and date of generation cannot be determined
- Asbestos-Related Work means any activity by which disturbing ACCM may release asbestos fibers into the air
- R** Assumed ACM Means materials assumed to contain more than one percent (1%) asbestos
- S** Asbestos fibers Asbestos fibers having an aspect ratio of at least 3:1 and 5 micrometers in length when air samples analyzed using Phase Contrast Microscopy (PCM)
- T** Authorized Visitor The Owner's Project Team members, the Owner's Representative, and any representative of a regulatory or other agency having jurisdiction over the Project
- Category I Non-Friable ACM Means asbestos-containing packings, gaskets, resilient floor covering, mastics, and asphalt roofing products containing more than 1 percent (1%) asbestos
- V** Category II Non-Friable ACM Means any material containing more than 1 percent (1%) asbestos, excluding Category I Non-Friable ACM, that when dry, and in its present form, cannot be crumbled, pulverized, or reduced to powder by hand pressure or the purposes of this Specification, these products include transite board, pipe and asbestos cement products, plaster, stucco, and paint – unless removed by aggressive or mechanical methods
- Clean Room An uncontaminated area or room that is a part of the Worker Decontamination Enclosure with provisions for storage of workers' clothes and protective equipment
- Clear Leak-Tight Packaging Means a clear translucent bag that allows for visual confirmation that the RACM, ACM, ACCM, ACWM inside a bag is kept adequately wet

- Y□ Competent Person□In addition to the definition in CCR □ 1926.32 □□□ one □□□ is capable of identifying existing asbestos hazards in the workplace and selecting the appropriate control strategy for asbestos exposure, □□□ has the authority to take prompt corrective measure to eliminate them, as specified in CCR □ 1926.32 □□□□□ in addition, for Class I and Class II work, one □□□ is specifically trained in a training course which meets the criteria of EPA's Model Accreditation Plan □□□ CCR □ 763.11 for supervisor, or its equivalent and, for Class III and Class IV work, one □□□ is trained in a manner consistent with EPA requirements for training of local education agency maintenance and custodial staff as set forth at □□□ CCR □ 763.92 a□□2□□
- Contained Work Area□A Work Area □□□□□ has been Isolated, Plasticed, and equipped with a Decontamination Enclosure System□
- AA□ Critical Barrier□One or more layers of plastic sealed over an opening into a work area or any other similarly placed physical barrier sufficient to prevent airborne asbestos in a work area from migrating to an adjacent area□
- BB□ Curtained Doorway□A device to allow ingress or egress from one area to another while permitting minimal air movement between the areas, typically constructed by placing three overlapping sheets of plastic over an existing or temporarily framed doorway, securing each along the top of the doorway, and securing the vertical edge of the outer two sheets along the opposite vertical side of the doorway (see detail on Decontamination Enclosure System Plan in the Drawing section of this Project Manual□)
- CC□ Decontamination Enclosure System□A series of connected rooms, with Air Locks or Curtained Doorways between any two adjacent rooms, for the decontamination of workers and materials and equipment□A Decontamination Enclosure System always contains at least one Air Lock to the Work Area□
- DD□ Differential Air Pressure Equipment: A portable local exhaust fan or "unit" equipped with HEPA filtration and capable of maintaining a constant, negative air pressure differential within the regulated work area by providing a low velocity air flow into contaminate areas from adjacent uncontaminated areas and exhausting filtered air outside the work area□
- EE□ Disturbance□Means activities that disrupt the matrix of ACM or PACM, crumble or pulverize ACM or PACM, or generate visible debris from ACM or PACM□Disturbance includes cutting away small amounts of ACM and PACM, no greater than the amount □□□□□ can be contained in one standard sized glove bag or waste bag in order to access a building component□In no event shall the amount of ACM or PACM so disturbed exceed that □□□□□ can be contained in one glove bag or waste bag □□□□□ shall not exceed 60 inches in length and width□
- Encasement (sealant)□A liquid material □□□□□ can be applied to Asbestos-Containing Material, and □□□□□ controls the possible release of Asbestos fibers from the material either by creating a membrane over the surface bridging encasement or by penetrating into the material and binding its components together (penetrating encasement)□
- GG□ Encapsulation□All herein-specified procedures necessary to apply an encasement to Asbestos-Containing building materials to control the possible release of Asbestos fibers into the ambient air□
- Enclosure□ All herein-specified procedures necessary to enclose completely Asbestos-Containing Material behind airtight, impermeable, permanent barriers□

□□□□ airborne concentrations of asbestos, exceed or there is a reasonable possibility they may exceed the permissible exposure limit. Requirements for regulated areas are set out in Title 8 CCR 1029.

KKK□ Regulated Asbestos Containing Material (RACM) The EPA in the National Emission Standard for Hazardous Air Pollutants (NESAP) defines RACM as a friable asbestos containing material, b) Category I non-friable asbestos containing material that has become friable, c) Category I non-friable asbestos containing material that will be or has been subjected to sanding, grinding, cutting or abrading, or d) Category II non-friable asbestos containing material that has a significant probability of becoming or has become crumbled, pulverized, or reduced to powder by the forces exerted to act on the material in the course of demolition or renovation operations regulated by Subpart M.

LLL□ Removal All herein-specified procedures necessary to remove Asbestos-Containing materials from the designated areas and to dispose of these materials at an acceptable site.

MMM□ SDS Safety Data Sheet

NNN□ Socker Room A room between the Clean Room and the Equipment Room in the Worker Decontamination Enclosure that hot and cold or warm running water, and suitably arranged for complete socking during decontamination. The Socker Room comprises an Air Lock between contaminated and clean areas.

OOO□ Surfacing ACM Means building material containing more than one percent (1%) of asbestos that is sprayed, troweled-on or otherwise applied to surfaces such as acoustical plaster on ceilings and fireproofing materials on structural members, or other materials on surfaces for acoustical, fireproofing, and other purposes.

PPP□ Surfactant A chemical wetting agent added to water to reduce surface tension and improve penetration.

□□□□ TCLP means the Toxicity Characteristic Leaching Procedure as specified in EPA 830-S-86, Test Methods for Evaluating Solid Waste.

RRR□ Thermal System Insulation (TSI) ACM Means building material containing greater than one percent (1%) of asbestos that is applied to pipes, fittings, boilers, breeching, tanks, ducts or other structural components to prevent heat loss or gain.

SSS□ Visible Emissions Means any emission, or evidence of emissions, including, but not limited to dust, debris, particles, or fibers coming from any RACM, ACM, ACCM, or ACM that are visually detectable without the aid of instruments. Visible emissions include, but are not limited to, any RACM, ACM, ACCM, or ACM found outside of contained work areas or outside of leak-tight containers.

TTT□ Washroom A room between the Work Area and the Holding Area in the Equipment Decontamination Enclosure System where equipment and waste containers are decontaminated. The Washroom comprises an Air Lock.

□□□□ Wet Cleaning The process of eliminating Asbestos contamination from building surfaces and objects by using sponges, mops, or other cleaning tools that have been dampened with water, and afterwards disposing of these cleaning tools as Asbestos-contaminated waste.

VVV□ Work – Means the obligation of the Contractor under the Contract Documents. Work includes, unless specifically exempted by the Contract Documents, the turning in of

all materials, labor, equipment, supplies, plant, tools, scaffolding, transportation, superintendent, permits, inspections, occupancy approvals, insurance, taxes, and all other services, facilities, and expenses necessary for the full performance and completion of the requirements of the Contract Documents. Work also means that which is furnished, produced, constructed, or built pursuant to the Contract Documents.

Work Area Also known as "Regulated Area" Designated rooms, spaces, or areas of the Project in which Asbestos Abatement actions are to be undertaken or which may become contaminated as a result of such abatement actions. A Contained Work Area is a Work Area that has been isolated, plasticed, and equipped with a Decontamination Enclosure System. An Isolated Non-Contained Work Area is a Work Area that is isolated but has not been plasticed and may or may not be equipped with a Decontamination Enclosure System.

Worker Decontamination Enclosure System That portion of a Decontamination Enclosure System designed for controlled passage of workers, and other personnel and Authorized Visitors, typically consisting of a Clean Room, a Shower Room, and an Equipment Room.

1.1.3 QUALITY REQUIREMENTS

A Safety Compliance In addition to detailed requirements of this Specification, comply with laws, ordinances, rules, and regulations of federal, state, regional, and local authorities and publications regarding handling, storing, transporting, and disposing of Asbestos waste materials. Submit matters of interpretation of standards to the appropriate administrative agency for resolution before starting the work. Where the requirements of this Specification and referenced documents vary, the most stringent requirement shall apply.

B Reference Standards

- Regulations. Applicable regulations pertaining to this asbestos abatement work include, but are not necessarily limited to, the following:
- San Diego County Air Pollution Control Board (SDCAPCD) – Asbestos Removal, Renovation, And Demolition Rule 1206, dated 11/1/2017 or more recent.
- California Division of Occupational Safety and Health (Cal-OSHA) Construction Safety Orders - Asbestos, Title 8, California Code of Regulations section 1529, et seq. 8 CCR 1529.
- California Health and Safety Code Section 25163, et seq. Transportation of hazardous waste.
- Title 22, California Code of Regulations, Section 66261.2 et seq. Characteristics of hazardous waste. Toxicity.
- Title 22, California Code of Regulations, Section 66268.7(a)(1).
- Title 22, California Code of Regulations, Section 66268.11 et seq. Treatment Standard for Asbestos-Containing waste.

- California Labor Code sections 60100 Employer Registration and 60109 Determining the Presence of Asbestos Prior to Contracting for Work
- California Safe Drinking Water and Toxics Enforcement Act of 1986 Proposition 65
- Title 29, Code of Federal Regulations, Parts 1910 and 1926-1101
- Title 40, Code of Federal Regulations, Part 61, Subpart M, National Emission Standards for Hazardous Air Pollutants (NESHAP) U.S. Environmental Protection Agency (USEPA)
- Title 49, Code of Federal Regulations, Part 172, U.S. Department of Transportation
- All other applicable Federal, State, and/or Local regulations, codes, and ordinances

Standards. Applicable industry standards pertaining to asbestos abatement work include, but are not limited to, the following:

- American National Standard Institute (ANSI) Publications
 - 92 Fundamentals Governing The Design and Operation of Local Exhaust Systems and
 - 882 Practices for Respiratory Protection
- National Institute of Occupational Safety and Health (NIOSH) Publications
 - Manual of Analytical Methods
 - Method 700
 - Method 702
- Applicability. The most current version of each document will apply. Where conflicts among these regulations or standards exist, the more stringent requirement or interpretation will apply.
 - Asbestos and Other Fibers by PCM and
 - Asbestos Fibers by TEM
 - Underwriters Laboratories, Inc. (UL) Publication
 - UL 86 High Efficiency, Particulate, Air Filter Units
- C. Before the commencement of any work at the site, the Contractor shall post bilingual (as appropriate) EPA, OSHA and DOS caution signs at entrances and exits to the Work Area to comply with EPA, OSHA and DOS regulations.
- D. Area Monitoring shall be performed by the Owner's Representative, which will conduct air sampling of the Abatement Project
 - 1. outside the building,
 - 2. immediately outside the Work Area,
 - 3. in the Work Area, and
 - 4. for Work Area Clearance Testing after decontamination operations.

- E Personal Monitoring and other monitoring, if required by law, or considered necessary by the Contractor for worker protection, shall be the responsibility of the Contractor

1.1.4 SUBMITTALS AND NOTIFICATIONS

- A Personnel Training Prior to the start of work, the Contractor shall submit a declaration certifying that all Contractor employees have been adequately trained, and photocopy of training certificates for each employee from their respective training agency or organization. When certified or other formal worker training is required by state or local agencies, Contractor may submit a photocopy of the employee's Asbestos Worker Certification Card in lieu of training certificates
- B Respirators Submit prior to the start of work, manufacturer's certification that the respirators to be used in this Project comply with government agency requirements. Contractor's certifications for each employee must clearly state that each employee has been fit tested and properly trained for respirators
- C Medical Examinations
- Submit proof that all individuals providing labor and/or professional services who will enter contaminated areas have had a current medical examination within one year of the Project start date
 - Provide the physician's interpretation of the medical examination to the Owner before the start of work or before the individual commences work on the Project
 - For individuals providing labor and/or professional services after the start of the Project, for whom a certificate has not initially provided, submit the physician's interpretation prior to their participation
 - Alternative Option Current medicals will be acceptable if they include a statement indicating the worker is fit to wear a negative pressure respirator while performing their duties
 - The Contractor shall resubmit the physician's interpretation for any worker or professional whose annual or employment termination medical examination becomes due while participating in the Project
 - This requirement can be waived or modified only by the Owner, either in writing or verbally, followed up in writing
- D Product Submittals and Substitutions Comply with pertinent provisions of Section 01300
- E Abatement Product Data Not less than ten (10) business days prior to the date of intended use of the product on the work site, submit, before the start of work, the manufacturer's catalogue, the manufacturer's technical data for all types of encapsulants, samples, all Safety Data Sheets, SDS and other items needed to demonstrate fully the quality of the proposed abatement materials. Under no circumstances shall proposed materials be used before written approval from the Owner, Owner's Representative. Submittals are required if the following materials are proposed (not necessarily a complete list). Do not submit data on products not proposed for this Project

- 1☐ Encausulant,
- 2☐ Surfakant,
- 3☐ Protective Packaging,
- ☐☐ Lagging adhesive,
- ☐☐ Glove bags,
- 6☐ Resaturant, and
- 7☐ Solvents☐
- ☐☐ Permits☐ Submit prior to the start of work ☐roo☐satisfactory to the Owner, Owner's Representative that all required permits have been obtained☐ If no permits are required, submit a notarized letter stating such☐
- G☐ ☐aste Transportation☐ Submit prior to the start of work the method of transport of ☐azardous ☐aste, including the name, address, EPA ID number, and telephone number of the Transporter☐
- ☐☐ ☐azardous ☐aste Disposal Facility☐ Submit for approval prior to the start of work the name, address, EPA ID number, and telephone number of the ☐azardous ☐aste Disposal Facility☐ to be used☐
- I☐ Contractor's Abatement Work Plan: Submit prior to the start of work a detailed work plan indicating the practices and procedures proposed for use in complying with the requirements of this specification. Include in the plan schematic drawings of the definitions of the locations and general configurations of all regulated work areas. Mark-ups of current project plans will suffice to satisfy this requirement. For each regulated work area, indicate the planned locations of personal decontamination units, equipment decontamination and waste load-out chambers, exhaust air filtration units, air exhaust locations, temporary utilities locations, work area view ports and any other elements or conditions of significance to the controlled completion of the work e.g., location of sanitary or storm drains that will require protection. The text of the Work Plan should address the sequencing of the asbestos work, the interplay of any skilled trades involved in the performance of the work, the methods to be used to assure the safety of site workers and visitors to the site, a disposal plan including the on-site location of secured waste storage areas, and a detailed description of the methods to be employed to prevent environmental impairment of the work site and its surrounding area. Expand upon the use of methods of removal to prohibit visible emissions from within the work areas, and for the packaging and transport of removed asbestos waste or debris.

Such a plan shall include☐

- 1☐ Location of Asbestos Work Areas☐
- 2☐ Layout and Construction details of Decontamination Enclosure Systems☐
- 3☐ Project schedule including important milestones, critical paths and interplay of trades involved in the work☐
- ☐☐ Personal air monitoring procedures☐
- ☐☐ Detailed description of the method to be employed in order to control pollution, including negative air equipment calculations☐
- 6☐ Names of Superintendent, Foremen, Project Manager and other key personnel, and their day time and emergency telephone numbers☐
- 7☐ Security Plan including sketches necessary to clearly describe the plan☐
- 8☐ Emergency evaluation plan for injured workers, compressor failure, fire and other emergencies☐

- 9□ Fire□at□ Plan including any sketches necessary to clearly describe the Plan□
- 10□ Contingency Plan□ Submit a Contingency Plan for emergencies including, but not necessarily limited to fire, accidents, medical emergencies, power failures, differential air pressure "negative air" system failures, or any other event that may require modification of decontamination methods or work area isolation procedures. Include in the Plan specific procedures for work area isolation and decontamination. **Note:** Nothing in this specification should be interpreted as instructions to impede the rapid and safe exiting from the work areas, nor to impede the provision of adequate medical attention in the event of an emergency.
- 11□ The Abatement Work Plan must be approved in writing by the Owner's Representative and Owner before the start of any work.
- Equipment Certification□ Submit prior to the start of work, manufacturers' certification that vacuums, negative air pressure equipment filters, and other local exhaust ventilation equipment conform to ANSI Z9.2-2006.
- K□ Rental Equipment□□ When rental equipment is to be used in removal areas or to transport waste materials, a copy of the written notification provided to the rental company informing them of the nature of use of the rented equipment shall be signed by the rental company and submitted to the Owner's Representative prior to the start of work. Rental equipment must be decontaminated prior to returning it to the rental agency.
- L□ Notifications□ As required, notification in writing of proposed asbestos work, with copy to the Owner, the EPA Regional Office, CalOSHA, local air pollution agency, and local authority with responsibility for enforcement of occupational health and safety regulations and enforcement of NESHAP regulation and its jurisdiction within the State of California.

Contact the following government agencies in writing by certified registered mail or overnight mail service, postmarked or delivered at least ten (10) days prior to Project commencement.

1□ California Division of Occupational Safety and Health (DOS) (Cal-OSHA)
777 Metropolitan Drive, Suite 207
San Diego, California 92108

2□ San Diego County Air Pollution Control District (SDCAPCD) Headquarters
1012 Old Grove Road
San Diego, California 92131

All notifications shall contain as a minimum the following information.

- 1□ Name, address and telephone number of the Owner including the contact person.
- 2□ Name, address, EPA numbers, license number and telephone number of the Contractor including the contact person.
- 3□ Name, address and description of the building, including size, age, and prior use of building.
- The type and quantity of friable Asbestos material involved and the description of the work.

10.2.2 AARDO'S MATERIALS ABATEMENT SPECIFICATION

- C
- ☐

1.1.7 TRAINING PROGRAM

- A
- ☐

Additionally, ea   employee shall be educated on the health risks and implications associated with asbestos exposure, including illnesses that can result from inhaling airborne asbestos fibers. This education shall emphasize the increased risk of lung cancer from asbestos exposure, particularly for individuals who smoke. Employees must understand the proper use and limitations of respiratory equipment, the purpose of medical surveillance, and the importance of monitoring airborne asbestos levels in relation to health and respiratory protection.

The training program shall comply with all applicable federal, state, and local regulatory requirements.

- B
- ☐

1.1.8 DRESS AND EQUIPMENT

- A
- ☐

- B
- ☐

- C
- ☐

1.1.9 RESPIRATORS

- A
- ☐

superseded by local regulations or more stringent requirements. Respiratory instructions shall be posted in the Clean Room.

- B. Full-face air-purifying respirators with EPA filters may be worn during the preparation of the Work Area, performance of repair work, use of glovebag techniques and decontamination work, provided Work Area fiber concentrations are less than 0.1 f/cc.
- C. When supplied air respirators are not required, the Contractor shall provide workers with approved, permanently personally-issued and marked respirators with changeable filters. The Contractor shall provide a sufficient quantity of filters approved for Asbestos so that workers can change filters during the workday. Filters shall not be used any longer than one workday or whenever an increase in breathing resistance is detected. The respirator filters shall be stored at the job site in the Clean Room and shall be totally protected from exposure to Asbestos before their use.
- D. Workers shall always wear a respirator, properly fitted on the face, in the Work Area, from the initiation of preparation work until all areas have been given written clearance by the Owner's Representative.

Part 2 – PRODUCTS

1.2.0 GENERAL

- A. Contractor shall furnish, provide and utilize the following products in the Work Area as specified.

1.2.1 PROTECTIVE COVERING (PLASTIC)

- A. Polyethylene Sheeting. Polyethylene sheeting used shall be in compliance with NFPA Standard 701 fire testing, with flame spread ≤ 5 and smoke development rating of ≤ 70 when tested by ASTM E-8. Minimal thickness shall be 6-mil.
- B. Polyethylene sheeting. Six (6) mil for protection of floors, walls, ceilings, doors, windows, fixed equipment, HVAC supply and return openings, and critical barriers.
- C. Spray Poly as a liquid must be non-flammable no flash point, vapor free, and not noxious. When dry, poly must be Class A rated, with flame spread ≤ 20 , have a fuel contribution of zero, and smoke development of ≤ 110 by ASTM method E-8.

1.2.2 TAPE

- A. High quality vinyl or fabric duct tape.
- B. Duct Tape 2" or wider, or equal, and capable of sealing joints of adjacent sheets of plastic, and for attachment of plastic sheet to finished or unfinished surfaces of dissimilar materials, and capable of adhering under both dry and wet conditions, including use of amended water.

1.2.3 PROTECTIVE PACKAGING

- A All Asbestos Containers (bags, drums, bins, etc.) must be suitable for loading, temporary storage, transit, and unloading of asbestos waste without rupture, or otherwise causing asbestos exposure to persons nor releases to the atmosphere. Use of rigid primary containers (bins, boxes, drums, etc.) is preferred and recommended. Where rigid primary containers are used, they shall be lined with a secondary leak tight barrier of poly sheeting or poly bags of minimal thickness of 6-mil. All containers used for disposal of asbestos-containing waste shall be labeled in accordance with applicable regulations, and in accordance with the requirements of 8 CCR Section 1029.
- B Bilingual labels (English and other appropriate language) on containment glove bags, waste packages, contaminated material packages and other containers shall be in accordance with EPA, OSHA and DOT standards.

1.2.4 WARNING LABELS AND SIGNS

- A As required by 29 CFR 1910.1001, 29 CFR 1910.1200, 29 CFR 1926.1101 and other pertinent state and local regulations including 8 CCR 1029, whoever is the most stringent.
- B Signs must be lettered in the language(s) necessary to communicate the safety hazard warnings to workers or visitors reasonably expected to be at the job site.

1.2.5 WETTING AGENTS

- A Materials will be sprayed with water containing an additive to enhance penetration. The additive or wetting agent will be polyoxyethylene at a concentration of one ounce per five gallons of water or as otherwise specified by manufacturer. A fine spray of this solution must be applied to prevent fiber disturbance preceding the removal of the materials. The asbestos will be sufficiently saturated to prevent emission of airborne fibers in excess of the exposure limits prescribed in the current OSHA standards referenced in these specifications. DRY REMOVAL WILL NOT BE ALLOWED EXCEPT WITH WRITTEN APPROVAL FROM EPA or BECAUSE OF DRYING WORK AREA TEMPERATURES.

1.2.6 LAGGING ADHESIVE

- A Shall meet NFPA 90A Code, such as Arabol, Childers CP-2, Insul-Cousti 102, or approved equal.

1.2.7 GLOVE BAGS

- A The glove bag typically constructed of six mil transparent regulated plastic as two 24-inch-wide-roasting long sleeve rubber gloves, one 24-inch-wide-roasting water and sleeve, an internal tool pouch, and an attached labeled receptacle for Asbestos waste.

1.2.8 TOOLS AND EQUIPMENT

A All tools and equipment shall at least conform to minimum and industry standards and California Code of Regulations (CCR)

B Equipment

- 1 Negative air pressure equipment EPA filtration systems shall have filtration equipment in compliance with ANSI Z92-2006, local exhaust ventilation No air movement system or air filtering equipment shall discharge unfiltered air outside the Work Area
- 2 Respirators shall be NIOSH approved for use with asbestos, lead, universal waste, or other contaminants anticipated in the work activities
- 3 Contractor is fully responsible for complying with OSHA, Cal/OSHA rules for other safety equipment, such as hard hats, safety harnesses, eye protection, gloves, footgear, and any other safety devices used on the site
- Pressure differential manometer with readable tape shall be provided by the Contractor including calibration documentation

C Tools

- 1 Shovels and spoons shall be rubber or plastic, suitable for use in plasticized containment
- 2 Saws, brushes, utility knives and other hand tools shall be of good quality and suitable for the intended uses The Contractor shall keep an ample supply on hand for the completion of the work

D Manometer

- 1 Shall have a built-in alarm Continuous hard copy readout optional

E EPA Vacuums

- 1 Shall comply with ANSI Z92-2006

F Vacuum Loaders

- 1 Shall have EPA filtration system in compliance with ANSI Z92-2006
- 2 Meets or exceeds OSHA, DOS and EPA safety regulations
- 3 Fully-enclosed negative pressure system

1.2.9 LUMBER

A Shall be flame retardant and carrying markings certifying such properties

1.2.10 SOLVENTS

A. Shall be non-toxic, non-carcinogenic, nonflammable flash-point in excess of 200°F, nonreactive with or damaging to materials it will come in contact with and approved for indoor use by regulatory agencies Provide ventilation of Work Area as required by manufacturer Vent exhaust to the exterior of the building and in a manner that will not

result in adverse effects to other areas of the facility, adjacent facilities or public areas
Solvents shall not be used in areas where food stuffs are stored

PART 3 – EXECUTION

1.3.0 WORKER PROTECTION

Provide respiratory protection in accordance with OSHA Regulation 29 CFR 1926.1101 and appendices ANSI 288.2-1980 Respiratory Protection regardless of negative exposure assessments. There shall be NO EXCEPTION to this requirement. As minimum protection, negative pressure air purifying respirators shall be worn. The contractor shall select the appropriate respirator based on an initial exposure assessment or exposure monitoring results. No employee or visitor shall enter any Regulated Work Area without this protection until clearance has been obtained. Ensure proper filters are worn using a NIOSH filter as a minimum.

Provide workers with sufficient sets of protective full body clothing. Such clothing shall consist of full body coveralls and headgear. Provide eye protection and hard hats as required by applicable safety regulations. Non-disposable type protective footwear shall be left in the contaminated equipment room/regulated area until the end of the asbestos abatement work, at which time such items shall be disposed of as asbestos waste or shall be thoroughly cleaned of all asbestos containing materials. Disposable type protective clothing, headgear and footwear may be used and shall be disposed of as asbestos waste. Bare feet will not be permitted. Provide authorized visitors with suitable protective clothing, headgear, eye protection and footwear whenever they are required to enter work areas.

All worker protection procedures – to be posted in clean room

1. Bilingual (English and other appropriate language) Worker Protection Procedures must be posted in the Clean Room. The first language of all workers is English, the bilingual procedures are attached.
2. Each worker and Authorized Visitor shall, upon entering the job site. Remove street clothes in the Clean Room and put on a respirator and clean protective clothing before entering the Equipment Room or the Work Area.
3. All workers shall, each time they leave the Work Area. Remove gross contamination from clothing before leaving the Work Area. Proceed to the Equipment Room and remove all clothing except respirators. Still wearing the respirator, proceed naked to the showers. Clean the outside of the respirator with soap and water while showering. Remove the respirator thoroughly shampoo and wash themselves.
4. Following showering and drying off, each worker shall proceed directly to the Clean Room and dress in their personal clothing. Before reentering the Work Area, each worker and Authorized Visitor shall put on a clean respirator and shall dress in clean protective clothing.
5. Contaminated protective clothing and work footwear shall be stored in the Equipment Room when not in use in the Work Area. At appropriate times or upon completion of Asbestos Abatement, dispose of protective clothing and footwear as contaminated waste, or launder in accordance with government regulations.

- 6□ Workers removing waste containers from the Equipment Decontamination Enclosure shall enter the Holding Area from outside wearing a respirator and dressed in clean disposable overalls. No worker shall use this system as a means to leave or enter the Passroom or the Work Area.
- 7□ The disposable dotting worn outside the Work Area shall be of different color or markings from the disposable dotting worn inside the Work Area.
- 8□ Workers shall not eat, drink, smoke or chew gum or tobacco, or utilize sanitary toilet facilities at the Work site except in established locations outside the regulated Work areas, and enclosures. Provide and post, the decontamination and Work procedures to be followed by workers as described in these specifications.
- 9□ Workers and Authorized Visitors with beards or hair are unshaven shall not enter the Work Area.

B□ Medical Examinations and Histories

- Before exposure to airborne asbestos, the Contractor shall provide each employee or professional service provider at the Project site with a current comprehensive medical exam, which includes a history of respiratory and gastrointestinal diseases. The exam shall meet the requirements outlined in:
 - **29 CFR 1910.1001**
 - **29 CFR 1910.134**
 - **29 CFR 1926.1101**
 - **Title 8 CCR, Section 5208 and Section 1529**
 - 2□ The Contractor shall submit a current Medical Examination report for each employee.
 - 3□ The medical report shall include a statement from the examining physician indicating whether the employee can or cannot:
 - Function normally while wearing a respirator.
 - Use a respirator without impairing the safety or health of the employee or other employees.
- No employee will be allowed to enter the Work Area without first providing a copy of their medical examination to the Owner's Representative. The employee's medical exam must be approved by the Project LE Consultant before entry.

C□ Employee Identification

- 1□ The Contractor shall furnish an employee roster to the Owner's Representative for each Work shift. Each employee entering the Work Area shall have in his possession a plastic-coated identification tag with the employee's photograph, name, age, weight, height, and eye color. Each employee shall bring to the Job at least two forms of identification, one of which has a driver photograph.

1.3.1 WORK AREA PREPERATION

- A□ All asbestos related removal work designated by Cal OSHA as Class I or Class II asbestos work shall be completed in accordance with Cal OSHA Construction Safety Orders for Asbestos 8 CCR 1529. Where conflicts between Work area preparations as described in the regulations versus specification exist the more stringent interpretation shall apply.

- B) **Electrical Lock-out** The Contractor, in coordination with the County, is responsible for the shutdown and disconnection of all electrical power within the work area. For the purposes of this Specification section, the work area is defined as including all wall, floor and/or ceiling cavities which will be opened as a result of the removal of wall, floor or ceiling materials. The Contractor will arrange for temporary power and lighting, and will ensure safe installation of temporary power sources and equipment per applicable electrical code requirements. The Contractor should notify the County in writing before disconnecting any power or communication lines that may service the subject buildings or adjacent buildings.
- C) **OVAC Isolation** The Contractor is required to shut down and isolate mechanical heating, cooling, and ventilating air systems to prevent contamination or fiber dispersal to other areas of the building. During the work, OVAC vents and any other airway openings into and out of the work area will be sealed with barriers consisting of a minimum 2 layers of 6-mil poly sheeting and duct tape. "Critical barriers" In the event of any containment breaches, filters in the OVAC systems will be removed and disposed as asbestos-contaminated waste.
- D) **Work Area Containment** Each regulated work area will be regulated and isolated "contained" from all building areas not a part of the work. All critical openings including, but not limited to, doorways, windows, tunnels, ducts, grills, diffusers, or openings through which ducting, piping or conduit passes are to be sealed securely with duct tape, spray adhesives, plastic sheeting or by other means, as necessary, to prohibit the passage of air out of the regulated work area. When removal of ACM from the exterior of a building is conducted using manual non-powered tools or equipment, and that which does not generate a Regulated ACM or require containment, the work area isolation may be achieved using barrier tape or other appropriate means to demarcate the perimeter of the regulated work area. Any fixed objects to remain within the proposed work area will be cleaned using EPA vacuum equipment and/or wet cleaning methods as appropriate, and completely enclosed with plastic sheeting. The plastic sheeting shall be, at a minimum, 6-mil fire-rated poly. If a containment is utilized as a regulated area then the Contractor will inspect the containment for gaps, breaches, tears, leaks, holes or other deficiencies. The Contractor will conduct a similar inspection not less than once at the start of each work shift. However, the Contractor will be responsible to ensure the integrity of the containment at all times. Containment deficiencies shall be corrected immediately and with utmost priority upon discovery.
- E) **Decontamination Facilities** At a minimum, a 3-chamber personnel decontamination decontamination unit with functioning squeegee will be constructed and used whenever Class I work is being conducted (See Section 2.1.1 above). Cover the floor under the decontamination units, hoses, and equipment with at least one layer of 6-mil poly. Securely attach the poly sheeting to the floor. A personnel decontamination unit with squeegee will be constructed contiguous with each Class I regulated work area. A curtained doorway will be constructed to separate individual chambers within a personal decontamination unit, as well as at ingress and egress points. The decontamination units shall be constructed in a manner so as to be free of physical hazards e.g., lagged metal or exposed wood surfaces. Alternate decontamination facilities may be used for Comediane or Class II asbestos work or asbestos roofing removal work. **To the extent feasible, a personnel decon unit must not be used for waste load-out.**
- F) **Movable and Loose Items** Movable and loose items located within the work area and not removed by the Owner are to be cleaned using EPA-filtered vacuum equipment and/or wet cleaning methods, as appropriate, and will be removed from the work area to a temporary location designated by the Owner.

- G) OS/A Class I Work Area Isolation For Work Areas. In OS/A Class I asbestos work is to be conducted removal of thermal system insulation (TSI) or surfacing material, the Contractor will erect a full, diminished air pressure enclosure. In addition to sealing critical openings, a minimum of one layer (additional layers may be required based on the localized conditions) of fire-rated 6-mil plastic sheeting will be installed on the walls, floors, and ceilings (as appropriate for the location and/or type of materials being removed). Exceptions to this may apply to the removal of TSI by means of glovebag techniques. In the case of TSI removal using glovebags, full-room "secondary containment" or partial-room "mini-enclosure" containment structures may, at the Project I/C Consultant's discretion, be additionally required. Floor layers shall be applied making sure that plastic is turned-up at the wall at least 16 inches and sealed to wall layers. All layers shall be sealed by overlapping the turned-up floor plastic a minimum of 12 inches. All joints and seams for each layer shall be glued and taped securely in a manner so as to prohibit water or air movement through the attached sheetings.
- H) OS/A Class II Work Area Isolation For Work Areas. In OS/A Class II asbestos work is to be conducted, the Contractor will prepare the Work Area in accordance with the regulatory requirements of Cal-OS/A 8 CCR 1529 et seq. and SDCAPCD Regulation Rule 1206. In addition to sealing critical openings, a minimum of one layer (additional layers may be required based on the localized conditions) of fire-rated 6-mil plastic sheeting will be installed on the walls, floors, and/or ceilings (as appropriate for the location and/or type of materials being removed). Floor layers shall be applied making sure that plastic is turned-up at the wall at least 16 inches and sealed to wall layers. All layers shall be sealed by overlapping the turned-up floor plastic a minimum of 12 inches. All joints and seams for each layer shall be glued and taped securely in a manner so as to prohibit water or air movement through the attached sheeting. In addition, a diminished air pressure enclosure, as documented by manometric measurements, is required for all OS/A Class I and II work. OS/A Class I Work Area isolation controls may be used for Class II work.
- I) For Work Areas. In OS/A Class II asbestos work is being conducted on the exterior of the building, and the asbestos work does not require containment under negative pressure, then the Contractor may isolate the work area using barrier tape or other appropriate measures to demarcate the regulated work area perimeter and prevent unauthorized entry. Critical openings, such as windows, doorways, louvered grills, HVAC intakes or other openings to the building located within the work area must be sealed and prevented from opening while the abatement work is being carried out. Plastic sheeting shall cover all horizontal surfaces within the work area to sufficiently capture all falling debris and prevent surfaces from being contaminated during removal.
- J) Work Area Obscurity. The Contractor will endeavor to block or obscure the view of the public into the asbestos abatement work areas but retain appropriate view portals.
- K) Adjacent Areas. Building areas immediately adjacent to regulated asbestos removal areas, such as corridors or hallways which are not themselves subject to asbestos material removal, but are necessary routes to and from regulated work areas, must be protected by the Contractor to prevent damage and/or contamination. Openings from these areas into areas where asbestos material removal activities will be conducted will have curtains doorways to further minimize air passage into non-regulated areas. The Contractor will also be responsible to make all required notifications to trades or other building occupants in areas adjacent to regulated abatement work areas.

- L Emergency Exits The Contractor shall establish emergency and fire exits from the Work Areas, or establish alternative exits satisfactory to the County and to local emergency authorities or other applicable agencies.
- M All exits leading out of regulated work areas shall be marked in bold lettering "EXIT" or "Emergency Exit." Exit markings shall be in the primary language(s) appropriate to communicate with the workers present in the work area.
- N Work Area Viewing Windoos If a containment is utilized as a regulated area then the Contractor will provide and construct observation windoos into all regulated work area containments. The viewing windoos will be of a visually transparent material of approximately 18" x 24" in size and/or will be constructed and maintained so as to allow unobstructed observation of the entire work area from outside the containment.
- O Work Area Communications The Contractor will be responsible for establishing and maintaining clear communications between the personnel in the work areas and those stationed outside, such that those communications can be maintained without need for workers to perform an exit from the work area that could require decontamination.
- P Differential Air Pressure Prior to the start of asbestos removal work, the Contractor will install EPA-filtered differential air pressure equipment (also known as "exhaust fan units" or "negative air machines") as specified herein, to maintain a diminished air pressure differential within the Work Area. The system shall not exhibit any visible emissions to the outside air and shall be designed and operated in accordance with the requirements in 40 CFR, Part 61, Section 61.12. These exhaust fan units will remain in place within a regulated Work Area throughout the abatement and decontamination phases of the work until the required visual and/or clearance air testing has been satisfactorily achieved. A minimum pressure differential of -0.02 inches of water column (0.02" w.c.), with respect to the air pressure of the area outside a Work Area, will be established and must be maintained at all times within all regulated Work Areas. Sufficient number of exhaust fan units shall be utilized to achieve a minimum of four air changes per hour, per containment. The Contractor shall have sufficient auxiliary units on-site and/or in place to maintain this requirement throughout the work, including backup or replacement units in the event of equipment failure. Air exhausted from this equipment shall be exhausted to the outdoors and, to the extent feasible, away from occupied areas around the building. Documentation of satisfactory differential air pressure shall require the use of a manometer, as specified herein. If, in the opinion of the Project Lead Consultant, the differential air pressure units are judged to be in need of maintenance or in any other way fail to meet typical industry standards, the units shall not be placed into operation on this project.
- Q Pre-Abatement Work Area Inspections Prior to the start of asbestos removal work, the Contractor, accompanied by the Project Lead Consultant, will conduct a detailed inspection of all equipment and Work Area isolation preparations to assure that appropriate engineering controls are in place and are functioning sufficiently to contain asbestos fibers to within the Work Area. The concurrence of the Project Lead Consultant will be required to determine that a Work Area has undergone adequate preparation to proceed with asbestos removal work. A Pre-Abatement Work Area inspection will be conducted for each regulated Work Area and each individual inspection must be documented in writing. Such documentation will be signed by the individual(s) conducting the inspection. A copy of each such documentation will be obtained by the Project Lead Consultant for conveyance to the Owner.

1.3.2 ASBESTOS REMOVAL

The Contractor is to follow all EPA NESAPS, DOS, CalOSHA, SDAPCD Rule 1206 guidelines as it relates to this material including but not limited to the California Code of Regulations, Title 8, Section 1529.

OSHA Class I Asbestos Work Materials designated for removal as OSHA Class I Asbestos Work will be removed in full compliance with the Class I Work Practices in Methods of Compliance prescribed in Cal OSHA's Construction Safety Orders for Asbestos 8 CCR 1529, et seq. All ACM or ACCM designated for removal as Class I Asbestos Work will likewise be removed in full compliance with the SDCAPCD, Rule 1206 Class I Asbestos Work may not commence until the work area(s) is/are prepared in accordance with section 131 of this Specification.

OSHA Class II Asbestos Work floor tiles, mastics, and other materials designated for removal as OSHA Class II Asbestos Work will, at a minimum, be removed in full compliance with the Class II Work Practices in Methods of Compliance prescribed in Cal-OSHA's Construction Safety Orders for Asbestos 8 CCR 1529, et seq. All ACM or ACCM designated for removal as Class II Asbestos Work will likewise be removed in full compliance with federal, State, and local air pollution control board regulations. Class II materials should, to the extent feasible, be removed with hand tools, so that they remain substantially intact. Class II Asbestos Work may not commence until the work area(s) is/are prepared in accordance with section 131. **Floor tile and/or floor tile mastic removal operations involving the use of mechanized work methods, including motorized floor buffers, must be conducted utilizing OSHA Class I Work Area Isolation methods and engineering controls as described in section 1.3.1 of this Specification section. This includes preparing the Work Area(s) in accordance with requirements for the removal of RACM.** ACM shall be wetted prior to and during its removal, handling, and waste disposal.

Work Area Regulation All asbestos removal Work Areas shall be regulated to prevent unauthorized entry. Isolation methods shall include, but not necessarily be limited to the use of barrier tape (yellow "Caution" and/or OSHA's "Danger Asbestos") and OSHA's "Danger Asbestos" signs. The Contractor shall maintain a daily Work Area entry/exit log and require all persons entering the Work Area to sign in and out. The Contractor will bear responsibility for controlling entry into the Work Area(s).

Interior Work Area(s)

- Establish a Regulated Work Area (RWA) delineated by barrier tape.
- Open air abatement with wet methods shall be utilized during the abatement.
- All non-porous items shall be decontaminated utilizing proper wet wiping and EPA-vacuuming practices.
- Place 6-mil polyethylene drop sheets in the RWA.
- Establish a decontamination area at the entry point to the RWA.
 - Install a 3-stage decontamination unit consisting of a clean, soaker, and equipment room.
- Establish a proper waste load-out area attached to the RWA and
- Post asbestos warning signs on all entry and exits into the RWA.

- The perimeter of the R/A shall be lined with 6-mil polyethylene and sandbags to prevent the potential of waste water traveling on-site. The waste water should be properly filtered prior to disposal.

Once the R/A is established and asbestos activities begin, no access should be permitted without the required personal protective equipment.

- All asbestos activities shall be performed by workers wearing proper personal protection equipment (PPE) including EPA filtered respiratory protection, as prescribed in 8 CCR 1029 and 8 CCR 1000.
- All asbestos activities shall be performed by workers wearing proper personal protection equipment (PPE) including EPA filtered respiratory protection, as prescribed in 8 CCR 1029 and 8 CCR 1000.
- Once abatement work begins, only authorized personnel with proper personal protective equipment shall be permitted to enter the R/A.
- All asbestos activities shall be performed using wet methods. Use of amended water, water with a chemical wetting agent or surfactant, to adequately wet ACMs and EPA filtered vacuums.
- Removal/disturbance of ACM shall be conducted in a manner that leaves the materials substantially intact, to the extent feasible.
- Small pieces of ACM or commingled debris should be properly wetted and manually using hand tools placed in transparent, leak-tight containers or wrapping.
- At the end of each work shift, any ACM containing debris shall be covered with 6-mil fire retardant, reinforced polyethylene topped with sandbags in transparent containers, sealed, labeled and disposed of as asbestos waste.
- After asbestos abatement activities are complete, the Consultant shall perform a post asbestos abatement visual inspection to determine if all asbestos containing materials and visible contamination have been successfully removed.
- If any asbestos containing materials or visible contamination are observed, additional abatement will be required until all asbestos containing materials and visible contamination are removed.
- All equipment used in the R/A (e.g., excavators, Bobcats, portable toilets, etc.) shall be properly decontaminated by EPA vacuum, wet hosed, EPA vacuum prior to being transported off-site.
- Any porous items used in the R/A (e.g., sandbags, straw bales, etc.) shall be disposed of as asbestos-containing waste.
- The interiors of the 10-yard containers shall be properly decontaminated by EPA vacuum, wet hosed, EPA vacuum and visually cleared of ACM prior to being transported off-site.
- Prior to exiting/leaving the R/A, all personnel, materials, equipment, containerized waste and anything else leaving the R/A shall be thoroughly decontaminated via EPA vacuuming, wet-hosing and EPA vacuuming again and sealed as necessary.

A. Before removal, Asbestos materials shall be sprayed with Amended Water. The Asbestos materials shall be sufficiently saturated without causing excessive dripping and prevent emission of airborne fibers, at any time, in excess of Maximum Allowable Level. Spray materials repeatedly during the work process to maintain a wet condition. If the materials are not easily saturated, then the work Area shall be constantly misted to keep fiber emissions minimal. Material

abatement will be removed wet following the NESAP Adequately Wet Guideline Manual

- B Asbestos material shall be removed in manageable sections by a multi-person team, some personnel are wetting and the remainder removing and cleaning. Any material that falls to the floor shall be wetted and picked up immediately. Material shall not be allowed to dry out. Material drops shall not exceed 1 foot or height exceeding 10 feet above ground level, provide leak-tight routes to transport waste to the ground. The waste material must be transported to the ground in clear leak-tight packaging. Before a second area can be started, removed material shall be packed into approved and labeled packaging while it is still wet. The outside of all containers shall be clean before leaving the Work Area. Move containers to the Passroom/Storage Room when Equipment Decontamination System is not required. Wet-clean each container thoroughly, and move to Holding Area pending removal to uncontaminated areas.
- C Asbestos material applied to concrete, steel decks, beams, columns, pipes, tanks, and other nonporous surfaces shall be wet-cleaned to a degree that no traces of debris or residue are visible.
- D Asbestos material debris, droppings, splatters, and overspray on surfaces within accessible ceiling cavities and other accessible areas shall be removed in the same manner and cleaned to the degree as specified above.
- E The Work Area shall be kept orderly, clean and clear of work materials, polyethylene sheeting, tape, cleaning material, and footing, and all other disposable material or items used in the Work Area. These materials shall be packed into properly labeled protective packaging and removed from the Work Area.
- F Protective packages and drums containing Asbestos materials shall be cleaned and stored in the isolated Holding Area until that time when the materials are to be loaded and hauled to the hazardous waste Disposal Facility for burial. The packages and drums shall be stored in piles no higher than four feet, and in a manner that will not result in damage to the packages or drums. Transport bags in covered drums or carts from the Holding Area to the transport.
- G Equipment removal procedures. Clean surfaces of contaminated equipment thoroughly by wet-scrubbing or wiping before moving such items into the Passroom/Storage Room when Equipment Decontamination System is not required. For final cleaning and removal to uncontaminated areas. Ensure that personnel do not leave Work Area through the Equipment Decontamination Enclosure.
- H Do not bag water used during abatement activities. Properly filter and drain water into building sanitary drain unless prohibited by local regulations. Filter shall have a maximum pore size of 10 micron.
- I Non-flammable materials.
 - 1 Remove materials using wet methods and in a manner that will not create visual emissions or exposures above the PEL. Adequately wet the materials before, during and after removal.
 - 2 Do not use saws, grinders, buffers, bead blasters, buffers or other surface mechanical equipment without EPA filtered local exhaust ventilation.
 - 3 The Work Area shall be kept orderly, clean and clear of work materials, debris, etc.

- ☐☐ Package non-friable materials in two layers of leak-tight containers consisting of 6-mil poly bags or lined containers labeled as Non-hazardous Waste – Non-friable Asbestos, or in accordance with the disposal facility's requirements.
- ☐☐ Roofing Materials
 - 1☐ Use removal methods that will keep the tearing and prying of the roof membrane to a minimum. If sawing tools are used, they must be factory equipped with EPA filtering devices, or perform in a manner that will not release visible dust emissions. Roofing debris made friable shall be misted with amended water before transportation to dumpsters. Do not use excessive amounts of amended water that may result in leakage into the building. Apply additional amended water, if necessary, when the roofing debris is in the dumpster. Install, when possible, a protective tarp under the Work Area or dumpster where amended water leakage may result in property damage.
 - a☐ ACM/ACCMs shall be bagged or containerized as it is removed. Asbestos shall not be dropped or thrown to the ground unless the material is carried or passed to the ground by hand, it shall be lowered via covered, dust-tight chute, crane, hoist, or other means that prevent the waste from being dropped or thrown.
 - b☐ Roofing shall be removed so that no felts are visible. Asphalt bitumen residue need not be removed from the substrate unless directed otherwise in the Contract Documents.
 - ☐☐ Save adequate material on hand and available labor to protect enclosed roof areas from water intrusion during inclement weather.
 - d☐ Do not commence dust removal work if inclement weather is probable. NOTE: Contractor shall be responsible for water damage as the result of the Contractor's work or failure to perform work. [Contractor shall be responsible for maintaining the abated portions of the roof free from moisture intrusion for seven (7) calendar days following the written notice of completion, or until the roofing contractor have been given Notice to Proceed by the Owner, whichever comes first].
 - e☐ The Work Area shall be kept orderly, clean and clear of work materials.
 - ☐☐ Package roofing materials in labeled double six (6) mil lined containers or bags, or in with the disposal facilities requirements.

1.3.3 DECONTAMINATION OF WORK AREA

A☐ Decontamination procedure for "Regulated" Work Areas:

- 1☐ Visible accumulations of loose asbestos containing waste material shall be cleaned up using rubber or plastic dustpans and rubber squeegees or

2. All visible accumulations of ACM, ACCM, debris tools, and unnecessary equipment shall be removed from the work area.
3. Prior to removal from a Work Area, the Contractor will decontaminate all tools, equipment, mechanical equipment. Decontamination will include, but not be limited to wet-wiping with amended water, EPA-vacuuming, and containerizing tools into subsequently decontaminated containers. Prior to removal from the Work Area, EPA-filtered vacuum cleaners will be wet-wiped and wrapped, bagged, or otherwise containerized for transport from the Work Area. Additionally, differential air pressure equipment is to be sealed with poly sheeting and tape, and externally decontaminated before removal from the Work Area. All equipment will be subject to inspection by the Project I/C Consultant prior to demobilization from a regulated Work Area.
4. Cleaning may be discontinued when there is no visible debris. The Contractor shall perform a complete visual inspection of the Work Area.
5. Post-Abatement Work Area Inspections. Subsequent to the completion of the cleaning, decontamination phases, the Contractor's Supervisor, accompanied by the Project I/C Consultant, will conduct a detailed visual inspection of the Work Area to ensure that the identified asbestos has been removed and that the Work Area has been adequately cleaned. The Consultant will be required to determine that a Work Area has undergone adequate cleaning. This Post-Abatement Work Area Inspection will be conducted for each regulated Work Area and each individual inspection must be documented in writing. Prior to conducting a Post-Abatement Work Area inspection, the Contractor will remove and replace the primary filter ("pre-filter") on each differential air pressure unit ("negative air machine"). All non-essential equipment is to be decontaminated, as described herein, and removed from the Work Area prior to commencing the Post-Abatement Work Area inspection.
6. Upon successful completion of the requirements for Post-Abatement Work Area Inspection, and unless otherwise specified, the Contractor shall apply a "lock-down" encapsulant to all horizontal and vertical surfaces within the Work Area. The encapsulant must be compatible with the existing surfaces. Following application of the encapsulant, a sufficient amount of time must pass to allow for the encapsulant to dry. The Contractor should plan, at a minimum, to allow for an extended (preferably overnight) drying period. In all instances, the decision as to whether an adequate drying period has elapsed will be at the discretion of the Project I/C Consultant. Upon completion of the asbestos-related work, the Contractor shall apply an encapsulant to all surface edges of the disturbed

asbestos-containing materials in the Work Area to prohibit fibers becoming airborne.

7. On the satisfactory Post-Abatement Work Area Inspections have been documented in writing and after any applied encapsulant has been allowed to dry the Contractor will remove the top layer of elastomeric on the walls, floors, and/or ceilings as appropriate. The inner elastomeric layer and primary isolation barriers (i.e. "critical barriers") on vents, grilles, diffusers, etc., are to remain in place for the clearance air sampling. Care should be taken to avoid pulling down any remaining layers of elastomeric sheeting. In Work Areas where a single layer of elastomeric has been used on the walls, floors, and ceilings where applicable, that elastomeric shall be removed, and critical barriers are to remain in place until air clearance sampling is completed and satisfactory air clearance criteria have been achieved.
- Removal of plastic layers and isolation engineering controls ("teardown") may not occur without the knowledge and authorization of the Project IH Consultant.**
8. Upon written notification from the Owner's Representative that the Work Area has passed the standard for Clearance Testing, the Contractor shall apply the asbestos-free replacement materials, when included in the contract, and re-establish objects and systems as specified in these Specifications.

Daily site view and clean-up procedures- Asbestos Abatement Activities

Each day, at the conclusion of each work shift throughout the duration of the abatement project, the asbestos abatement Contractor shall conduct a site review and cleanup of all interior and exterior work areas of the project site. This will include work area for all of the on-site trades providing on-site services near or around the asbestos containing materials as listed in the applicable survey reports and this specification. Any asbestos building material debris that is encountered during the end of shift walk-through will be promptly cleaned using wet methods and thoroughly EPA vacuumed.

1.3.4 ASBESTOS DISPOSAL

- A. All Asbestos-Containing Waste Material (ACW M) shall be kept adequately wet until sealed in leak-tight containers or clear leak-tight packaging.
- B. Asbestos waste from control devices shall be mixed thoroughly with water to form a slurry.
- C. No visible emission shall be discharged to the outside air from collection, mixing, setting, and handling of ACW M.
- D. After setting, all ACW M shall be sealed in leak-tight containers or clear leak-tight packaging and must remain adequately wet. Materials that will not fit into containers without additional breaking shall be placed into clear leak-tight packaging.
- E. The containers or packaging specified above shall be labeled using warning labels specified by Federal OSHA or Cal/OSHA under 29 CFR 1926.1101(k)(8)(iii) or 8 CCR 1529(k)(8)(C). Printed in letters of sufficient size and contrast so as to be readily visible and legible.

2. The Owner's Representative shall report the Area Air Monitoring results to the Contractor on the following day. If Area Air Monitoring results are unsatisfactory, the Contractor shall make changes in his engineering controls and work practices to ensure compliance with the following standards. Unsatisfactory results are over counts within the work Area in excess of the Maximum Allowable Level or over counts outside the work Area in excess of the Benchmark.

B. Personal Air Monitoring

1. Throughout the abatement activities and subsequent cleaning operation, personal air monitoring shall be conducted by the Contractor. Personal breathing zone samples shall be collected on a representative number of abatement employees daily to determine their 8-hour time weighted average (TWA) exposure to asbestos fibers in addition to one thirty (30) minute sample each work shift to determine if the excursion limit (EL) of 10 f/ft³ and Permissible Exposure Limit (PEL) is exceeded in accordance with OSHA (29 CFR 1926.1101) and DOS (CCR Title 8 Section 129) requirements. Analysis shall be conducted according to 29 CFR 1910.1101, Appendices A and B which describe the OSHA Reference Method.
2. Once OSHA and DOS sampling requirements are satisfied the Contractor shall conduct, as a requirement of this Contract, not less than one (1) personal air sample, twice per calendar week, to determine 8-hours TWA exposures and thirty (30) minute Excursion Limit exposures of workers operating in each work Area. Samples shall be collected within the workers' breathing zones. Samples shall be taken for each ten (10) workers from the time preparation work is started until the work Area has passed Clearance Testing. NOTE: Contract required personal sampling of each worker is not necessary while the Contractor is conducting representative OSHA and/or DOS required sampling or when Supplied-Air Respirators in pressure demand mode are in use.
3. The Contractor shall report Personal Monitoring results to the Owner's Representative within 8 hours from the end of the work shift. Worker exposures to airborne Asbestos concentrations shall not exceed the PEL of 8-hours TWA of 0.1 fibers per cubic centimeter of air, or the 15-minute period Excursion Limit.
3. The minimum amount of air samples collected per work area by the Contractor will be 1 30-minute STEL sample per day and 1 personal sample per employees per day per activity.

C. Clearance Testing

1. The Contractor should not be released until final visual inspection and EPA PCM NIOS 7000 final air clearance has been achieved in the regulated areas.

1.3.6 STOPPING THE WORK

A. If at any time, the Owner's Representative decides that Work Practices are violating pertinent regulations, these Specifications or, in his opinion, endangering workers or the public, he will immediately notify the Contractor followed up in writing that operations shall cease until corrective action is taken, and the Contractor shall take such corrective action before proceeding with the work. Loss or Damages due to a Stop Work Order shall be borne by the Contractor.

END OF SECTION I

SECTION II

LEAD-BASED PAINT

LEAD-BASED PAINT ABATEMENT AND LEAD-RELATED CONSTRUCTION WORK

SPECIFICATION

10-24-2024

DESCRIPTION

All work included Contractor shall furnish all labor, materials, services, permits, insurance and liability covering the handling and transportation of Lead Based Material or Lead-Containing Material and Lead-Containing Waste Material and equipment which is specified, shown, or reasonably implied for lead-related construction work associated with the Lead-Based and/or Lead-Containing Paints listed in the following table.

Table 2-1: Identified LCMs Titan Environmental Solutions November 7, 2023						
Sample No.	Sample Locations	Component / Substrate	Color	Paint Condition	Lead Concentration (PPM)	Category
1107-01	N End Exterior	Wall: Stucco	Tan	D	720	LCM
1107-02	E End North Wall Exterior	Wall: Stucco	Blue	I	210	LCM
1107-03	End	Wall: Stucco Mural	Multi-Color	D	63	LCP
1107-04	E End	Wall: Cinder Block	Tan	D	96	LCM
Legend N = North, E = East, W = West, S = South Classification - BRL = Below Method Reporting Limit of 38 - 100 ppm total lead - LCP = Lead Containing Materials with lead concentrations ≥ Method Reporting Limit and ≥ 90 ppm - LCM = Lead Containing Materials with lead concentrations ≥ Method Reporting Limit - 10,000 ppm - LBP = Lead-Based Paints with lead concentration ≥ 5,000 ppm Locations are estimates based on accessible materials located in the survey area only. Additional locations may be present at the Subject Property.						

Table 2-2: Identified LCMs / LBP Environmental Safety Health and Operations Program (ESHOP) Memorandum Report Conducted October 11, 2007		
Material #	Material Type	Result
L001	Exterior Paint	80 ppm Lead Detected
L003	Interior Paint	900 ppm Lead Detected

The Environmental Safety Health and Operations Program (ESHOP) Hazardous Materials Investigation Memorandum report, identified the following:

- Lead-Containing Paint – Throughout Interior & Exterior of Building**

B Contractor is required to verify the scope of work prior to commencing work, including quantities of materials to be removed, and to determine the degree of difficulty in removing the identified materials.

C Applicable Publications The work conducted shall comply with all applicable federal, state and local regulations. Applicable guidelines and standards listed in this Scope of work include, but are not necessarily limited to:

- 1 Department of Housing & Urban Development (DHEC) "Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing" dated June, 1990
- 2 Code of Federal Regulations (CFR) Publications
 - 29 CFR 1910.13 Respiratory Protection
 - 29 CFR 1910.100 Safety Regulations for Accident Prevention Signs & Tags
 - 29 CFR 1910.107 Lockout/Tagout
 - 29 CFR 1910.1020 Access to Employee Exposure & Medical Records
 - 29 CFR 1910.102 Lead General Industry Standard
 - 29 CFR 1910.1200 Hazard Communications
 - 29 CFR 1926.100 Gases, Vapors, Fumes, Dusts & Mists
 - 29 CFR 1926.62 Lead Construction Standard
 - 29 CFR 1926.200 Signs, Signals & Barriers
 - 40 CFR 61 National Emission Standards for Hazardous Air Pollutants
 - 40 CFR 261 Criteria for Classification of Solid Waste
 - 40 CFR 261 Identification and Listing of Hazardous Waste Disposal Facilities and Practices

10/2/2007 HAZARDOUS MATERIALS ABATEMENT SPECIFICATION

- 80 CCR 262 Standards Applicable to Generators of Solid Waste
 - 80 CCR 700 Lead-Based Paint Poisoning Prevention in Certain Residential Structures
- 3 California Code of Regulations (CCR) Publications
 - 8 CCR 1532.1 Construction Safety Orders - Lead
 - 8 CCR 198 General Industry Safety Orders - Lead
 - 8 CCR 100 Respiratory Protective Equipment
 - 17 CCR Div 1, Chapter 8 Lead Based Paint and Lead Based Cards
- American National Standards Institute (ANSI) Publications
 - 882-201 Practices for Respiratory Protection
 - 871-2010 Eye Protection
 - National Institute of Occupational Safety and Health (NIOSH) Publications
 - Manual of Analytical Methods, 2nd Edition, Volume 1, Physical & Chemical Analysis Method (PCAM)
 - Method 7082
 - Method 7300
- 6 Other Local or Regional Regulations that apply to Lead-Related Work

Please note Contractor is responsible for ascertaining the extent to which these regulations will affect removal operations and to comply therewith.

This project is not a lead abatement project. The lead activities on this project are being conducted due to the demolition of buildings listed. The areas identified and any estimated quantities mentioned in the lead sampling report or this specification are approximate and should be confirmed by the Contractor through on-site verification.

The lead removal specification in place for this project is to work in conformance with all local, state, and federal regulations requirements concerning lead in construction. Contractor is required to follow all local, state, and federal regulations requirements concerning all aspects of working around lead materials whether stated in the removal specification or not and for any conflict that arises between the lead removal specification and any regulations requirements, the most current and most stringent will apply.

Since the building listed above is undergoing renovation or demolition, **all construction personnel** performing the construction work should be properly trained in lead-related construction. California regulations define lead-related construction work as, "Construction, alteration, painting, demolition, salvage, renovation, repair, or maintenance of any residential, public or commercial building, including recreation and cleanup, which, by using or disturbing lead containing material or soil, may result in significant exposure of individuals to lead."

CAL-OSHA Regulations (Title 8 CCR Section 1532.1 and 29 CFR 1926.62) apply to all construction work where an employee may be occupationally exposed to lead, and therefore may be applicable to renovation or demolition projects involving paints with any concentration of lead. When conducting construction activities, which disturb lead in any amount or that may create an exposure to workers, the employer is required to provide worker protection and conduct exposure assessments. All California employers should consult Cal- OSHA Regulations at Title 8, 1532.1, "Lead in Construction" standards for complete requirements.

DEFINITIONS

General Explanation A substantial amount of section language constitutes definitions for terms found in other contract documents. Certain terms used in Contract Documents are defined in this article.

- A Owner State of California
- B Abate or Abatement Means any set of measures designed to reduce or eliminate lead paint or lead-based paint
- C Accredited or Accreditation A person or laboratory accredited in accordance with Section 206 of Title II of the Toxic Substances Control Act (TSCA) and/or accredited by the American Industrial Hygiene Association (AIHA)
- D Aerosol A system consisting of particles, solid or liquid, suspended in air
- E Air Monitoring The process of measuring the lead content of a specified volume of air
- F Authorized Visitor The Owner, the Owner's Representative, testing lab, the Consultant/Engineer, emergency personnel or a representative of any federal, state and local regulatory or other agency having authority over the project
- G Barrier Any surface that seals off the work area to inhibit the movement of particles
- H Breathing Zone A hemisphere forward of the shoulders with a radius of approximately 6 to 9 inches
- I Ceiling Concentration The concentration of an airborne substance that shall not be exceeded
- J Certified Industrial Hygienist (CIH) An industrial hygienist certified in Comprehensive Practice by the American Board of Industrial Hygiene
- K California Certified Lead Professional means an individual who has a current Lead-Related Construction Certificate with the California Department of Public Health (CDPH). This includes Certified Inspector/Assessors, Project Monitors, Contractor Supervisors and Sampling Technicians
- L Contractor Means any business entity, public unit, or person performing the actual abatement for a lead abatement project
- M Demolition The breaking or taking out of any building component, system, finish or assembly of a facility together with any related handling operations
- N Disposal Bag A properly labeled 6 mil thick leak-tight plastic bags used for transporting lead waste from work and to disposal site
- O Encapsulation Means to resurface or cover surfaces and to seal or caulk seams with a durable material, so as to prevent or control tracking, taking lead-containing substances from becoming part of construction dust

- P** **Filter**—A media component used in respirators to remove solid or liquid particles from the inspired air
- PEPA** **Filter**—A High Efficiency Particulate Air (HEPA) filter capable of trapping and retaining 99.97% of particles greater than 0.3 microns in diameter
- R** **HEPA Filter Vacuum Collection Equipment**—or vacuum cleaner—high efficiency particulate air filtered vacuum collection equipment that a filter system capable of collecting and retaining lead particles. Filters should be 99.97% efficiency for retaining particles of 0.3 microns or larger
- S** **High-efficiency particulate air filter**—EPA refers to a filtering system capable of trapping and retaining 99.97 percent of all monodispersed particles 0.3 um in diameter or larger
- T** **Interior Work Area**—A hallway, room or group of rooms in which abatement takes place on the inside of a property
- LEBP** **Lead-Based Paint**—Paint or other surface coatings that contain lead equal to or greater than one milligram per square centimeter (10 mg/m²) or more than 0.01 percent by weight or more than five-thousand parts per million (ppm) by weight
- LECP** **Lead-Containing Paint**—Paint or other surface coatings that contain lead equal to or greater than 0.1 mg/m² as measured by RMD or any detectable concentration by AAS or ICP analyses
- LR** **Lead-Related Construction Work**—means any construction, alteration, painting, demolition, salvage, renovation, repair, or maintenance activity, including preparation and cleanup, that, by using or disturbing lead-containing material or soil, may result in significant exposure of adults or children to lead
- NPR** **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
- NPVS** **Negative Pressure Ventilation System**—A pressure differential and ventilation system in containments
- PM** **Personal Monitoring**—Sampling of the lead concentrations within the breathing zone of an employee
- PDVS** **Pressure Differential and Ventilation System**—A local exhaust system, utilizing HEPA filtration capable of maintaining a pressure differential with the inside of the Work Area at a lower pressure than any adjacent area, and which means recirculated air or generates a constant air flow from adjacent areas into the Work Area

- AB ☐ Protection Factor ☐ The ratio of the ambient concentration of an airborne substance to the concentration of the substance inside the respirator at the breathing zone of the wearer ☐ The protection factor is a measure of the degree of protection provided by a respirator to the wearer ☐
- AC ☐ Repair ☐ Returning damaged lead-based paint to an undamaged condition or to an intact state so as to prevent particle release ☐
- AD ☐ Time Weighted Average ☐ TWA ☐ The average concentration of a contaminant in air during a specified time period usually 8-hours ☐
- AE ☐ Visible Emissions ☐ Any emissions containing particulate material that are visually detectable without the aid of instruments ☐ This does not include condensed uncombined water vapor ☐
- AF ☐ Wet Cleaning ☐ The process of eliminating lead contamination from building surfaces and objects by using wet methods, mops, or other cleaning utensils ☐ Have been damaged with water containing ☐ trisodium phosphate ☐ TSP or diluted removal emulsant and afterwards thoroughly decontaminated or disposed of as lead-contaminated waste ☐
- AG ☐ Work Area ☐ The area where lead-related work or removal operations are performed ☐ is defined and/or isolated to prevent the spread of lead dust or debris, and entry by unauthorized personnel ☐ Work area is a Regulated Area as defined by 29 CFR 1926.62 ☐

PART II – GENERAL

2.1.1 RELATED DOCUMENTS

Drawings, Contract Documents, and other Technical Specification sections apply to work of this section ☐

2.1.2 Known and Assumed Lead Painted Areas associated with the demolition project.

All paint found within the exterior and interior of this project will be treated as lead-based paint until released by the Owner's Representative ☐ This will include a review of all historical data, current sample results, and negative exposure assessments ☐ NEA ☐

2.1.3 SUMMARY OF WORK

A ☐ Perform all planning, administration, execution, and cleaning necessary to safely remove and/or work around lead paint, as required as part of this contract in association with the activities scheduled to take place as indicated in the Contract Documents, exercising due care and utilizing proper protective

measures as necessary to prevent personnel exposures and environmental contamination.

- B. Identify location of all lead paint to be removed as indicated in the bid specifications and as identified during the pre-construction job talk and outlined in this section.

2.1.4 SCOPE OF WORK

A. Refer to any demolition key notes listed on any office demolition floor plans provided by the Owner and the lead removal specification for this building for any demolition activities in this building. Some items in a direct path of any office lead materials, the Contractor will take necessary actions in working in and around the lead materials as listed, following the lead removal specification that is applicable. All painted materials will be treated as lead containing unless stated or not in the lead removal specification. Several areas that contain asbestos and have been listed in the asbestos removal specification that has been prepared for this modernization are also painted. Cross reference the asbestos removal specification and the lead paint removal specification for details.

Damage to the paint containing lead is anticipated - reference both the lead specification and the asbestos specification during this project.

1. Remove and properly dispose of all flaking and blistered paint containing any amount of lead from all work areas identified as required. Remove and properly dispose of any Restroom sinks, Restroom Toilets, Porcelain Sinks, Porcelain Drinking Fountains as lead containing.
2. Remove paint that contains any amount of lead that is in good condition from lead painted materials only as necessary to provide a clean surface for cutting, welding, or torching.
3. Properly package, characterize, transport and dispose of lead painted materials, paint "chips" and associated debris, cleaning materials and used personal protective equipment.
4. All building materials with paint attached, construction debris with lead painted building components, lead removal components, all associated removal debris, and restroom fixtures from the abatement shall be tested using the WET METHOD (TTLC and then TCLP, and/or STLC) as required for hazardous waste disposal. The collected small debris and paint chips that are to be disposed of by the Contractor will most probably be classified as a hazardous waste. Characterize packaged waste prior to removal of waste from the site. All waste stream sampling for lead waste generated by the lead abatement Contractor as listed will to be completed by the removal Contractor – removal waste stream sampling and reporting.

- 5. Transport the packaged lead painted waste to an approved landfill and dispose of following disposal requirements based upon profile sampling. Notify the Owner how the waste will be disposed prior to the waste leaving the site.
- 6. Perform personnel lead exposure monitoring and biological monitoring as required for the safety of the Contractor's workers.
- 7. The general contractor/demolition contractor shall conduct all debris waste pile sampling prior to disposal of demolition debris created during the project. Debris sampling following the State of California waste stream sampling criteria. Construction demolition waste stream sampling and reporting.
- 8. The general contractor shall notify all employees and sub-contractors of the presence of lead materials that may be in a direct path of their construction/demolition activities. General lead awareness shall be completed for all personnel that may come in contact with lead materials as part of this construction project.

B. Work Not Included

- 1. Environmental air monitoring and clearance sampling - if needed for the Owner.

2.1.5 SUBMITTALS

- A. Provide submittals to the Owner's Representative at appropriate times in the execution of the work to allow for sufficient and prompt review by Owner's Representative. Revise and resubmit as necessary to establish compliance with the specified requirements.

2.1.6 WORKSITE CONDITIONS

Worker and Visitor Procedures. The Contractor is hereby advised that the U.S. Government has determined lead to be a POISON. Contractor shall provide workers and visitors with respirators, at a minimum, shall meet the requirements of OSHA and protective clothing during reparation of system enclosures, prior to commencing, during actual lead removal, and until final clearance tests are achieved.

2.1.7 WORKER PROTECTION

It is the responsibility of the Contractor to maintain adequate protective equipment and procedures for all his employees and those of subcontractors and suppliers at all times, and to instill in them a high level of safety-consciousness for the duration of the Project as they relate to all lead requirements for work being completed in the State of California.

2.1.8 QUALITY ASSURANCE MEDICAL EXAMINATIONS

Before exposure to lead-contaminated dust, provide workers with a comprehensive medical examination as required by 29 CFR 1926.62 and 29 CFR 1926.103. The examination will not be required if adequate records show that employee has been examined as required by 29 CFR 1926.62 within the last year. Also required is baseline biological monitoring consisting of blood lead level and in Protocor™ prior to job assignment. Other requirements as defined in title 8 CCR 1321 also apply. All persons who may be exposed to lead shall be given a comprehensive physical as required in the lead standard. This physical shall include a base line lead in blood test to prove that blood lead levels are less than 2 ug of lead per 100 grams of whole blood.

Medical Records

Maintain complete and accurate medical records of employees for a period of at least 30 years or for the duration of employment plus 20 years, whichever is longer.

Training

The on-site consultant shall verify that each employee performing paint removal, disposal, and air-sampling operations has received training prior to the time of initial job assignment, in accordance with local, state, and federal standards. Lead in Construction Training in accordance with title 8 CCR 1321 as a minimum. Only properly trained and certified lead workers shall be allowed inside the exclusion areas during removal or cleaning. All on-site sub-trades that may be exposed to any amount of lead or come in contact with lead, shall receive Lead in Construction Training in accordance with title 8 CCR 1321 as a minimum.

Training Certification

Contractor will submit certificates signed and dated by the training facility and by each employee stating that the employee has received training all required lead training. A re-start training meeting will take place with all employees over several days associated with this project.

Personal Protective Equipment (PPE)

All personnel who will be authorized to enter the areas of potential contamination will be fully qualified to wear respiratory protection as defined in 29 CFR 1910.133, 29 CFR 1926.62, Title 8 CCR 1321 and Title 8 CCR 1000. The abatement Contractor will assure that such personnel have received medical approval to wear respiratory protective equipment, and have successfully been fit tested with the brand, model and size of respirator that will be worn. Documentation of medical fitness and fit testing will be provided. These requirements will remain in effect for all personnel who enter the work area until air-monitoring results demonstrate that airborne levels of lead dust are below 30 micrograms per cubic meter of air, and fit-testing protocol proves that the areas are safe for unprotective habitation.

In addition to the extent that more stringent requirements are written directly into the Contract Documents, the following regulations and standards have the same force and effect and are made a part of the Contract Documents by reference as if incorporated directly into the Contract Documents, or as if published copies were bound hereinto. Where there is a conflict in requirements set forth in these regulations and standards, meet the more stringent requirement.

OSHA - U.S. Department of Labor Occupational Safety and Health Administration, Safety and Health Standards 29 CFR 1910.102 and 13, 29 CFR 1926.62

Cal/OSHA – California Division of Occupational Safety and Health, Safety and Health Standards 8 CCR 208, 21, and 132.1

ANSI - American National Standard Practices for Respiratory Protection, ANSI Z89.2-2011

NIOSH - National Institute for Occupational Safety and Health Approved Respiratory Protection Devices and Lead Air Samples Analytical Methods

CDP – California Department of Public Health Title 17 Lead Regulations

The level of respiratory protection assigned will be based on the results of monitoring for airborne lead fumes and dust in the work area. The results of the air monitoring will be submitted to the Owner.

Permissible Exposure Limit (PEL)

- 1. 8-hours' Time Weighted Average (TWA) Concentration of lead to which any worker may be exposed to shall not exceed 0.05 mg/m³

Respiratory Protection Factors

from 8 CCR 21 Table 1 – Assigned Protection Factors

<u>Respirator Type</u>	<u>Protection Factor</u>
Air Purifying respirator Negative Pressure respirator P-100 filter Full facepiece	10
Air Purifying respirator Negative Pressure respirator P-100 filter Full facepiece	50
Powered Air Purifying Respirator (PAPR) Positive Pressure respirator P-100 filter Full facepiece	1,000
Supplied Air Respirator Positive Pressure respirator Continuous Flow or Pressure demand or	1,000

other positive pressure mode
full facepiece

Self-contained breathing apparatus (SCBA) 10,000
Pressure Demand mode

Air Purifying Respirators

- Respirator Face-Piece Provide full-face or half-face type respirators. Equip full face respirators with a nose cup or other anti-logging device.
- 2 Filter Cartridges Provide, at a minimum, EPA type filters labeled with NIOSH Certification or "P-100" and color coded magenta. In addition, a chemical cartridge section may be added, if required, for solvents, etc., in use. In this case, provide cartridges that have each section of the combination canister labeled with the appropriate magenta and black color code and NIOSH Certification.
- 3 Non-permitted respirators Do not use single use, disposable or quarter face respirators.

All respirators and cartridges shall be NIOSH approved for lead dust and fumes. All personnel shall initially wear at least a full-faced negative pressure respirator with approved cartridges for lead dust, mists, and fumes for paint spraying. **Contractor to submit a respirator protection program).**

Fit Testing

- 1 Initial Fitting Provide initial fitting of respiratory protection during a respiratory protection training course. Fit types of respirator to be actually worn by each individual. Allow an individual to use only those respirators for which training and fit testing have been provided.
- 2 On an Annual Basis Check the fit of worker's respirator by having irritant smoke blown onto the respirator from a smoke tube.
- 3 Upon Each Fitting Require that each time an air-purifying respirator is put on it be checked for fit with a positive and negative pressure fit test in accordance with the manufacturer's instructions or ANSI Z88.2-2011.

In addition to the initial fit test for the brand, model and size of respirator to be worn by each assigned worker, a field fit test to determine that the face piece properly seals will be performed each time the respirator is put on.

The following steps will be taken:

- a Adjust the respirator to the face according to the manufacturer's instructions.
- b Cover the air inlets with the palms of the hands.
- c Gently inhale so that the face piece collapses slightly.
- d Hold your breath for ten (10) seconds.

- e□ The respirator shall remain slightly collapsed if it
no inward leads detected
- Close off the exhalation valve if the alarms off the
bands
- g□ Exhale gently
- A small buildup of positive pressure,
if no outward leaks,
- i□ Indicates a good fit

All workers assigned to lead abatement related work will be provided sufficient sets of protective full-body disposable clothing. The suits will be taped at the wrist and ankles prior to entering the work area. Additional protective clothing will consist of disposable gloves, foot coverings and headgear. Eye protection and hard hats will be provided and shall be worn by all personnel in the exclusion or abatement areas. Furnish each employee required to wear a negative pressure respirator or other appropriate type if it a respirator fit test at the time of initial fitting and at least every 6 months thereafter as required by 29 CFR 1926.62. Establish and implement a respiratory protection program as required by ANSI Z88.2, 29 CFR 1926.103, 29 CFR 1926.62, 29 CFR 1926.104.

Hazard Communication Program

Establish and implement a Hazard Communication Program as required by 29 CFR 1926.119.

Employee Information, Training and Certification

The employer shall provide information about lead hazards, according to the Hazard Communication standard Section 19. Cal/OSHA Lead in Construction Standard to all employees exposed to lead.

For all employees exposed to lead at or above the action level (AL) on any day, exposed to lead compounds that cause eye or skin irritation, or who perform any of the specified trigger tasks, the employer shall provide initial pre-placement training that includes all of the required content from the OSHA standard and its appendices.

Hazardous Waste Management

Contractor will submit a hazardous waste management plan to the Owner prior to beginning any lead paint work. Federal, State, and Local hazardous waste regulations will be followed as well as these items that are to be addressed in the Contractor submitted plan.

- a□ Proper notification and site posting prior to any lead paint activities or disturbance. This may include but is not limited to reporting to CDP Form 8001- at least 15 days before conducting lead-related construction work. Cal/OSHA notifications at least 24 hours before conducting lead-related construction work involving any of the trigger tasks listed in the OSHA standard and required site/tenant postings.
- b□ Identification of hazardous wastes associated with the work.
- Estimated quantities of wastes to be generated and disposed of.
- d□ The 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.

e. Names and qualifications, experience and training of personnel who will be working on-site with hazardous wastes.

f. List of waste handling equipment to be used in performing the work, to include cleaning, volume reduction, and transport equipment.

g. Spill prevention, containment, and clean-up contingency measures to be implemented.

h. Work plan and schedule for waste containment, removal and disposal. Waste shall be cleaned up and containerized daily.

Safety and Health Compliance

In addition to the detailed requirements of this specification, Contractor shall comply with laws, ordinances, rules, and regulations of federal, State, and Local authorities regarding removing, handling, storing, transporting, and disposing of lead waste materials. Comply with the applicable requirements of the current issue of 29 CFR 1926.62.

Competent Person

The Contractor shall have a competent person on site all times during the lead paint activities performing duties in accordance with 1926.62. They will be performing the following:

A. Certify that training has meet all federal, state, and local requirements.

B. Review and approve lead-based paint removal plan for the conformance to the applicable reference standards.

C. Continuously inspect lead based paint removal work for conformance with the approved plan.

D. Perform air and wipe sampling as required.

E. Ensure that work is performed in strict accordance with the specs at all times.

F. Control work to prevent hazardous exposure to human beings and to the environment at all times.

G. Certify the conditions of the work as called for in the specifications.

PART 2 – PRODUCTS

2.2.1 PRODUCT HANDLING

A. Deliver all materials as described in this Section in the original packages, containers, or bundles bearing the name of the manufacturer and the brand name.

B. Store all materials subject to damage on the ground, away from wet or damp surfaces, and under cover sufficient to prevent damage or contamination.

the designated exit site. The Contractor may provide a shower, but it is not required for the paint stripping. A shower is not supplied by the Contractor, then an area for changing the hands and face of the workers in an area segregated from the work area is required. Personnel will only be EPA vacuuming themselves prior to leaving the lead restricted zones for stripping. They will first vacuum themselves off and then go into the clean room to dress out in clean clothes. All protective equipment, and other contaminated equipment will be placed into labeled containers or plastic bags while still inside the restricted zones or containments. Equipment that is to be removed from the hazard zone shall be contained or bagged as described, or it shall at a minimum be set aside down or EPA vacuumed prior to exiting the contained lead work areas.

All wastewater from showering if there is showering, and other waters used for cleaning must be tested for disposal. It is, therefore, required that all water from cleaning or decontamination operations be stored in an onsite container.

Water for emergency eye wash and drinking shall, also, be provided at the decontamination site.

Place all tools, staging, etc. necessary for the work in the area to be isolated prior to erection of plastic sheeting drop cloths and boundary work enclosures.

Contractor shall shut down and lock out all electrical power to the area. Contractor shall fire in temporary power as specified from outside the work area for abatement activities. This includes lighting inside enclosure unless it is rated for a wet location.

Constructing Temporary Facilities

1. Owner may designate an area on-site for Contractor's use as a temporary hazardous waste storage site. Contractor is responsible for security of hazardous waste from the time it is generated until its ultimate disposal at the landfill.
2. Construct decontamination units for lead paint work as specified.
3. Inspect containers for leaks or corrosion weekly and keep written records of inspections on site.

2.3.2 CONTROL ACCESS

- A. Permit access to the lead-contaminated work areas only through the decontamination unit. All other means of access shall be closed off and sealed and warning signs displayed on the clean side of the sealed access.

Warning signs printed in English will be posted at the perimeter of the restricted area to provide notice of potential airborne lead. The signs will be located at regular intervals and at such a distance that personnel may read the signs and take necessary precautions required prior to entering the area. Signs shall conform to 29 CFR 1926.62. The sign shall be at least 20" by 14" displaying the following legend in the lower panel.

**WARNING
LEAD WORK
AREA POISON
NO EATING,
DRINKING, OR
SMOKING**

Entry and exit routes will be established and clearly marked. Control of site entry and exit will be established before the project begins.

Employee and authorized personnel will enter the containment areas through a worker site egress and exit site. All personnel must be at the decontamination site located at a convenient entry and exit point to building areas. Anyone who enters a work area must read this plan and sign an entry log upon entry and exit. All pertinent information, like the abatement plan, will be posted at this entrance and exit site.

Prior to entering the work area, personnel will read and become familiar with all posted regulations, personal protection requirements and emergency procedures. A sign-out sheet will be used to acknowledge that these procedures and regulations have been received and understood by all personnel.

Engineering controls will be established and maintained to control lead dust including the establishment and maintenance of the lead control area, decontamination system and continuous misting and EPA vacuuming by experienced, trained, certified abatement personnel from the abatement Contractor.

2.3.3 PREPARATION / EXECUTION

A. General Set up Operations – Paint Stabilization prior to demolition of lead painted building materials

Because of the low risk associated with this type of lead abatement, a full containment or lead abatement is not required. Lead safe work practices will be followed per title 17. There will be at least a lead restricted zone around all sites of paint scrape, and recreation or the scraping will be in accordance with the 1990 RRP Guidelines, Chapter 8, Tables 8-1 through 8-3.

1. Provide warning signs and barrier tape to demark the lead paint work area.
2. Contractor shall ensure that the lead contamination is confined within the work area and that all surfaces located in the work area are free from any lead accumulation when the work is completed. This shall be accomplished by creation of an impermeable containment.
3. Provide drop cloths of six mil polyethylene sheeting at the base of materials to be addressed. Extend drop cloths a minimum of six feet beyond the area. Where lead painted materials will be scraped.
4. Install critical barriers consisting of one layer of six-mil reinforced polyethylene sheeting.

Ensure that all barriers remain effectively sealed and taped for duration of abatement and subsequent cleaning. Visually inspect enclosure at the beginning of each work period. Repair damaged barriers and remedy defects immediately upon discovery. Contractor shall be responsible for environmental cleanup of areas contaminated due to failure of critical barrier system.

- Construct separate worker decontamination units in compliance with OSHA guidelines concerning number, size and placement of airlocks, etc. Squeegee in worker decontamination unit shall open into airlock on both contaminated and uncontaminated sides. Construct decontamination units of appropriate materials including plywood and plastic sheeting. Squeegee in personnel decontamination unit shall contain both hot and cold running water. Sufficient squeegee units to comply with OSHA regulations. Post OSHA decontamination procedures in change room and equipment room for duration of Project. Decontamination units shall be constructed weather tight and shall have a lockable door. Provide keys for decontamination door to Owner and Engineer.
- 6□ Install waste/water collection system. Collect squeegee and wash water for characterization and disposal. Squeegee and wash water shall be segregated from other waste, filtered through filters having not more than 5-micron pore size, and characterized for disposal as a separate waste stream. Dispose of used filters with solid waste. Install a sum pump of sufficient capacity to collect twice the amount of waste liquid and sludge expected to be produced.
- 7□ Notify Abatement Consultant for observation and acceptance of all critical barriers, EPA filtration systems, and decontamination units before proceeding.

B. Paint Stabilization (addressing loose and flaking paint)

For Painted Substrates with Paint in Poor Condition (flaking, blistered, cracking)

- 1□ Prepare work area as previously specified in Paragraph 3.03 of this section. For Exterior loose and flaking paint stabilization prepare the work area as stated 3.03 of this specification and follow exterior work practices. Work area shall consist of those areas where paint is in poor condition or cutting may occur. The intent is not total removal of paint but the stabilization of paint which may delaminate from the substrate during re-painting operations.
- 2□ Remove lead paint which is in poor condition. Acceptable methods include wire brushing, or scraping. Do not use chemical strippers for removal of paint in poor condition. There shall be no visible emissions from any lead remediation work. All lead abatement work shall be done under wet conditions and methods shall be used to remove the loose and flaking paint safely. All paint scraping and scraping must be done in such a manner as to preclude any emissions of lead dust. The Contractor shall keep the dust down to bare minimum levels. Once removed, the immediate areas inside the containment shall be cleaned up by EPA vacuuming and wet wiping and EPA vacuuming again. The abatement Contractor must spray water mist to keep dust levels down, and EPA vacuum up dust and any loose debris from the poly that shall be placed on the floor or soils/cavements during scraping to catch debris. The abatement Contractor will

□EPA vacuum, wet wipe, and □EPA vacuum again and the conclusion of stripping. The abatement Contractor shall not use dry sweeping to clean up any loose leaded debris.

- 3□ Only approved ladders or scissors lift shall be used to elevate workers, if necessary. All workers who are required to work at heights above four feet shall be equipped with lifelines and harnesses.
- All paint flakes, and other debris that is generated from this operation shall be lightly wet wiped up by hand or □EPA vacuumed and placed into a clearly labeled hazardous waste container. All lead paint chips, dust and debris shall be waste profiled prior to disposal per federal, State, and local requirements.
- The debris from the abatement shall be tested using the □ET MET□OD □TTLCL and then TCLP, and/or STLC as required for hazardous waste disposal. The collected small debris and paint chips that are to be disposed of by the Contractor will most probably be classified as a hazardous waste.
- 6□ The abatement Contractor shall ensure that all areas of lead surface are thoroughly clean and free of dust and paint chips.
- 7□ Package lead painted debris for waste characterization and transportation to disposal site following the disposal plan in this work plan.

If building material substrate cutting is required where lead paint is present, remove lead paint from areas where cutting will occur. Remove paint from a strip no less than 12 inches wide. Acceptable methods include chemical strippers and full stripping.

- a□ Conduct area set up as listed above. Section 3.03.
- b□ Perform paint stripping operations in accordance with manufacturer's directions including the recommended personal protective equipment.
- Perform the operation over a drop cloth to catch any paint chips which may be generated.
- d□ Clean surface in accordance with manufacturer's recommendations. Use minimal amount of liquids necessary to remove stripper and lead paint materials.
- e□ Segregate waste from chemical stripping operations for disposal as a separate waste stream.
- Lead painted materials must be cut into manageable pieces, use methods that will minimize dust. If open flame cutting methods are used in conjunction with chemical strippers, Contractor shall take adequate precautions to ensure against fire and explosion.

Air & Environmental Monitoring

Sampling of airborne concentrations of lead dust will be performed in accordance with 29 CFR 1926.62 and Title 8 CCR 1321. Air monitoring will be conducted by the Project I□ Consultant. If the sampling may also be utilized during the project to ensure lead control areas are adequate and are not being breached.

Area monitoring will be conducted each shift during the abatement process at the designated limits of the control areas.

The Contractor shall collect personal samples, at their expense, for those workers who are anticipated to be at the greatest risk of exposure as determined by the onsite supervisor. Air samples will be taken on at least 200 of the work crew or a minimum of 2 persons. If the number is greater, during a work shift, the quantity of airborne lead dust monitored at the designated limits at any time exceeds $30 \mu\text{g}/\text{M}^3$, all work will be stopped and the Project Lead Consultant shall be immediately called to direct correction of the conditions causing the increased levels and notify the abatement Contractor. The Project Lead Consultant shall review the sampling data taken during that day to determine if conditions require any further change in work methods. Work shall resume when approval is given by the Project Lead Consultant. Adjacent areas are contaminated, the areas will be cleaned, monitored and visually inspected.

2.3.4 BUILDING CONTAMINATION

- A If it is determined by visual identification or air samples that building contamination has occurred as a result of the negligence and/or poor work practices of the Contractor, the Contractor agrees to clean the affected premises at no charge to the Owner. The Contractor also agrees to accept all liability for damages claimed or lawsuits brought by persons exposed to such contamination.
- B The Contractor shall be responsible for all costs incurred by the Consultant should other portions of the building become contaminated with lead dust as a result of the Contractor's poor work practices or other activities.

Cleanup and Final Clearance Testing

- A Provide general clean-up of work area. On current site, the stripping of lead paint. Do not permit accumulation of debris on worksite floor.
- B At the Owner's option, five samples will be collected around the various lead operation work areas and in "clean rooms" or decontamination units to document effectiveness of Contractor's isolation practices. Keeping lead contamination localized. Samples indicate levels higher than background levels, Contractor will be required to perform cleanup of contaminated areas at its own expense.
- C The Owner's Representative shall conduct containment/control area effectiveness air monitoring prior to, and throughout, stabilization and cleaning operations. If environmental sampling indicates lead levels higher than background levels, Contractor will be required to perform cleanup of contaminated areas at its own expense.
- D Lead Operations Clean up and Clearance testing
 - 1 EPA-vacuum all surfaces to remove loose debris. Use all surfaces with a solution of trisodium phosphate (TSP) and water to remove dust and film. Dispose of filters frequently to avoid spreading contamination. Re-EPA vacuum all surfaces that have been wiped down.
 - 2 Notify the Owner's Representative for observation to determine completeness of cleaning.
 - 3 The competent person will conduct a thorough visual inspection before there is any final clearing of the yard or restricted zone. After the final clean-up, a preliminary visual inspection will be conducted by the Owner's Representative to ensure that all visible dust and debris has been removed. The Contractor shall provide the Owner's Representative at least 24 hours' notice prior to

scheduling inspections if the Work Area is not visibly clean, as determined by the preliminary visual inspection by the Owner's Representative, the Contractor shall re-clean and decontaminate, until the Work Area passes inspection. Once the criteria for visual inspection has been satisfied, final clearance air samples will be taken and analyzed. Upon notification from the Owner's Representative that work area is visibly clean, the owner's representative will oversee final Clearance testing.

All clearance air samples shall be collected in accordance with Regulatory Guidelines at the discretion of the Owner's Representative, a minimum of three samples per 1,000 SF, one each from the floor, window sill and exterior horizontal surface.

- a. Clearance Guidelines
 - 10 µg/m³ Interior floors
 - 100 µg/m³ window sills
 - 100 µg/m³ exterior horizontal surfaces

The results from the air monitoring and air testing will be submitted to the Owner and the abatement Contractor. Cleaning will continue, if necessary, until these clearance criteria are met. The barriers and signs establishing the containment will not be removed until these final visual clearance criteria have been met.

- 6. Upon notification from the Owner's Representative that lead final clearance samples indicate acceptable clearance levels, dismantle decontamination enclosure systems, remove critical barriers, and thoroughly EPA-vacuum and air the area with trisodium phosphate solution.
- 6. Lead sample results will be reported in terms of micrograms of lead per cubic meter of air (air samples) or micrograms of lead per square foot of surface (dust samples). Samples will be collected in accordance with EPA, OSHA, or OOD recommended procedures for the type of sample being collected.
- 6. If any sample indicates contaminant levels higher than the specified clearance levels, full decontamination and clearance procedures including re-sampling shall be performed at Contractor's expense.
- 7. All other trades personnel will be excluded from the work area until the owner gives approval for the area to be reoccupied without respiratory protection and the engineering controls have been demobilized.

Fire and Medical Emergency Response

Each day a tailgate safety meeting shall be held outside of the containment areas for all assigned personnel prior to the start of work. All personnel will be made aware of the site address and the location of any existing on-site fire alarms and the location of the nearest telephone. This information will also be posted at the on-site notice posting board located at the entrance to any lead control area along with the phone numbers for police, fire, ambulance, and the name and location of the nearest emergency medical facility. The abatement Contractor in his submittal package prior to any work must provide this information to the Owner.

In the event of a medical emergency within the control area, the sick or injured person will be decontaminated before removal if the nature of the illness or injury is not life threatening or will not be exacerbated by the decontamination process. If the illness or injury is life threatening, or is likely to be made worse by the decontamination process, then the ill or injured person will be removed immediately without regard to decontamination and medical attention summoned. Illness and/or injuries occurring on the job will be promptly and thoroughly investigated.

In the event of fire, the first person to notice the fire shall alert others within the control area and immediately evacuate. The fire alarm, if present, will be activated and the fire department will be called from the nearest safe place.

A complete first aid kit will be kept on-site for minor injuries.

Disposal of Lead Waste

Suspect lead containing paint residues will be tested to determine whether it is hazardous waste. All suspect hazardous paint chips, dust and other generated waste shall be tested first for total lead or TTLC, and then by the STLC/TCLP leaching test procedures for lead content prior to disposal. All waste characterization will be performed by the Contractor, at the Contractor's expense, and submitted to the consultant for approval.

All waste generated from this work shall be treated as hazardous waste until STLC/TCLP or TTLC results indicate otherwise. The Contractor is responsible for any disposal of all waste, whether common construction debris or RCRA hazardous waste like paint chips and dust from the abatement process.

Small lead contaminated hazardous waste including water, silt, debris, bags, containers, equipment, and floating debris may produce airborne concentrations of lead dust will be collected and placed into MSDOT approved drums for disposal. Each drum will be properly labeled to identify the type of waste and the date the drum was filled.

A uniform hazardous waste Manifest for the small debris from paint chip scraping abatement work will be obtained and properly filled out, by adhering to the following procedures. At the start of the project, the empty container must be in good condition, empty, lockable and have a valid state certification. If the container fails the inspection, the deficiency must be corrected or another container obtained.

When the container is approved, the Contractor will begin a manifest and hold it for up to 90 days. The abatement Contractor will provide information such as job site, contract number and the ultimate disposal site. The container will be marked with the current date as the accumulation start date. Waste may not be stored in an accumulation area for more than 90 days. Other container markings must be in place as required by law.

Lead waste paint dust and chips, restroom fixtures will be properly packaged and loaded into the container, which will be locked at all times except during loading or inspection. RCRA lead waste shall go in DOT approved barrels to be transported by an approved hazardous waste hauler.

Containerized waste will be loaded into an enclosed truck for transport. The enclosed cargo area of the truck will be lined with 6-mil poly sheeting to prevent contamination from leaking or spilled containers.

The personnel loading the lead containing waste will wear protective equipment including overalls, head and foot coverings, gloves and a respirator.

Characterize packaged waste prior to removal of waste from the site. All waste stream sampling for lead waste generated by the lead abatement Contractor as listed will to be completed by the removal Contractor – removal waste stream sampling and reporting.

The general Contractor demolition Contractor shall conduct all debris waste pile sampling prior to disposal of demolition debris created during the project. Debris sampling following the State of California waste stream sampling criteria – construction demolition waste stream sampling and reporting.

All building materials, paint attached, construction debris, lead painted building components, lead removal components, all associated removal debris, ceramic tiles, and restroom fixtures from the abatement shall be tested using the SET METHOD TTLC and then TCLP, and/or STLC as required for hazardous waste disposal. The collected small debris and paint chips that are to be disposed of by the Contractor will most probably be classified as a hazardous waste. Characterize packaged waste prior to removal of waste from the site.

2.3.5 COST FOR DISPOSAL OF HAZARDOUS WASTE

- A The cost for the correct disposal of all waste of this project shall be included in the Total Base Bid, including the lead abatement waste to be disposed of as hazardous waste based upon TTLC, STLC, and TCLP testing as outlined in this section, and according to CCR 201, 261, and 262. The cost for the disposal as hazardous waste shall include all fees, permits, labor, materials, profit, overhead, waste transfer costs, and all other costs incidental to hazardous disposal.
- B The Contractor shall submit to its approved laboratory for testing, samples of each type of component removed as part of the work of this project. The Contractor's total base bid shall include minimum requirements of the testing of materials referred to in this Section. In addition to these materials, the Contractor's base bid shall include the cost of two samples of each type of component that was not removed in the sample dwelling units but will be removed during the project.
- C Any additional TTLC, STLC, and TCLP testing requested by the Owner shall be at cost agreed to between Owner and Contractor. This cost shall be based upon required turnaround time for sample analysis results, and upon type of analysis requested. The Contractor shall provide a minimum of three competitive prices for review by Owner. The Contractor shall apply for payment for additional testing costs under proper change order procedures as defined in the Contract Documents. The acceptance of the application for change order is subject to the review and approval of the Owner.

END OF SECTION II

SECTION III

PCB's / Mercury Containing Light Tubes / Universal Waste Handling, Removing, and Disposal Specification

Scope of Work

This work plan addresses the handling, removing and disposing of the following materials including but limited to:

1. Polychlorinated Biphenyls (PCBs) containing materials in electrical ballasts
2. Mercury containing light tubes
3. General universal waste
4. Other Regulated Materials

This work plan will be put in place if any construction activities takes place around the existing lighting structures that will cause disturbance in association with the lighting. The removal, hauling, and disposal of the referenced materials and all associated activities to complete the project as listed will be conducted at the contractor's expense. All remaining Hazardous/Other Regulated Materials (ORM) are to be properly removed, transported, recycled, and/or disposed in accordance with all applicable regulations local, state, and federal and these specifications.

The findings from the survey on universal wastes are detailed in Table 3-1. This table provides a comprehensive summary of the universal wastes inventory identified within the survey area.

**Table: 3-1
Universal Waste Checklist
Project Number: DGS San Diego Haz Mat Survey
Project Name: 1301 State Street, San Diego, California 92101**

Material	1301 State Street
Thermostats containing liquid mercury	Assumed
Lead sulfate-sulfuric acid batteries	Assumed
Mercury switches and devices	Assumed
Oil-filled gauges, devices, valves and parts	Assumed
Oil-filled filter units	Assumed
Oil-filled door closer reservoir	Assumed
Paints & Solvents	Assumed
Water heater	Assumed
Electrical light ballasts	Assumed
LED light lamps and bulbs	Assumed
Fluorescent light lamps and bulbs	Assumed
Mercury Light bulbs	Assumed
Halogen Light bulbs	Assumed
Red Kidde fire/smoke detectors fire Detector Horn Strobe	Assumed
High intensity discharge lamps	Assumed
Oil filled gauges	Assumed
PCBs containing ballasts	Assumed
Radioactive detector ballasts	Assumed
Radioactive compact fluorescent tubes	Assumed
Analog electrical meters	Assumed
Fire extinguishers	Assumed
LED Exit signs	Assumed
Compressed hydrocarbons and other gases cylinders	Assumed
Refrigeron from air conditioning units	Assumed
Expansion dampers with PCBs oil	Assumed
Interchangeable ignition transformers	Assumed

Electrical Transformers	Assumed
Refrigerator	Assumed
Generator	Assumed
Electrical Thermostats	Assumed
EV Parking Stations	Assumed

Additionally, the ESOP Hazardous Materials Investigation Memorandum report identified the presence of the following:

- Polychlorinated Biphenyls (PCB) Light Ballasts – Throughout Interior of Building
- Elevator Hydraulic Fluid – Elevator Control Room
- Freon – VAC Unit Room
- Mercury Thermostats – Throughout Interior of Building
- Fluorescent Light Tubes – Throughout Interior of Building

Definitions

Definitions are those contained in 40 CFR 761

Notifications

The project owner and the on-site inspector shall be given a courtesy notification ten (10) days prior to start of any related work outlined within this specification work plan.

References

Code of Federal Regulations (CFR)	
29 CFR 1910.133	Respiratory Protection
29 CFR 1910.144	Hazard Identification Signs and Tags
29 CFR 1910.1000	Air Contaminants
29 CFR 1926.109	Hazard Communication
40 CFR 761	Polychlorinated Biphenyls (PCBs) Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions
40 CFR 171	General Information, Regulations, and Definitions
40 CFR 172	Hazardous Materials Tables and Hazardous Materials Communications Regulations
40 CFR 173	Shipments and Packing
40 CFR 174	Carriage by Rail
40 CFR 175	Carriage by Airplane
40 CFR 176	Carriage by Vessel
40 CFR 177	Carriage by Public Highway
40 CFR 178	Shipping Container Specification
40 CFR 179	Tank Cars

Submittals

The Consultant's review of submittals shall not relieve the Contractor from the responsibility for complying with contract drawings or specifications unless the Contractor has secured the written approval of the Consultant for all deviations. Consultant's review of submittals shall not relieve the Contractor from responsibility for errors and omissions in the submittals.

Submittals shall contain only those items specified and shall not include items which are not provided for under this contract unless they are clearly marked and/or voided as not being part of this contract. The submittals that are required are as follows:

Prior to Start of Work Activities:

As required, notification in writing of proposed work, with copy to the Owner, the EPA Regional Office, OSHA or OSHA Regional Office, local air pollution agency, and local authority with responsibility for enforcement of occupational health and safety regulations and enforcement of any environmental regulations within jurisdiction in the state in which this project is located.

Submit proof satisfactory to the Owner that all required permits, site locations and arrangements for transport and disposal of PCB containing materials, mercury filled light tubes, universal waste, and Other Regulated Materials (ORM) and general waste and debris have been obtained.

Submit to the Owner for information and approval, a description of the plans for construction of decontamination enclosure systems and for isolation of the work areas in compliance with this specification and applicable regulations.

Submit documentation to the Owner indicating that all employees have had medical examinations and instruction on the hazards of PCB exposure, use of protective clothing, respirator fit tests, entry and exit from work areas, on work procedures and protective measures.

All training, medical examinations, and respirator fit-testing shall conform to Title 8 California CODE OF REGULATIONS (CCR) 208 as well as 40 CFR, Part 763, Appendix C to Subpart E as applicable.

The Contractor shall submit to the Owner, including but not limited to the following:

- a. Weekly work schedule.
- b. Various manufacturers information, including Safety Data Sheets (SDS).
- c. Type and brands of materials for worker protection.
- d. Method of application and materials to be used.
- e. Medical exam results of all employees (OSHA 1910.1001), including chest roentgenogram, pulmonary function and forced expiratory volume at second (Contractor is responsible for the appropriate medical releases).
- f. Test results both personal air monitoring data and air pressure differential between work areas and external air.

- g) Copies of all daily manpower and work logs indicating areas and type of work performed
- h) Copies of all certifications of disposal
- i) Copies of permits
- j) Copies of all OSHA Form 101 or equivalent accident/injury/incident reports

Fall Protection

Scaffolds and man lifts shall be equipped with guardrails and workers provided with the proper fall protection equipment

Freestanding scaffolds shall not extend higher than four times the minimum base dimension. Guardrails, toe boards, and outriggers shall be installed on scaffolds more than six feet in height. Planks shall extend to no more than 12 inches past the end support. Scaffolds and scaffolding shall be in accordance with established standards.

Only approved ladders shall be used inside the regulated areas. No ladder shall be placed directly on areas lined with polyethylene.

The contractor shall supply for approval a written fall protection safety plan.

Hazard Communications

The contractor shall supply for approval a written ongoing hazard communication program. There will be a file of SDS on site at all times for items used on this job site.

Respirator Protection Program

The Contractor shall supply for approval a written respiratory protection program.

Submittal Procedures

Deliver to the Owner point contact two copies of the submittal.

All submittals shall be submitted in hard-copy, three-ring, loose leaf binders, properly indexed with tabs separating each section.

Comply with progress schedule for a timely submission of submittals as they relate to work progress. Coordinate submittal of related items.

Emergency Procedures

All personnel should be briefed that the single emergency telephone number is 911.

Fire:

In the event of a fire, all personnel shall evacuate the area and call the fire department. Personnel shall be briefed to assemble at on-site designated area. The onsite Competent Person shall be responsible for accounting for all employees. There shall be a minimum of two exits designated from the work area.

Medical:

There shall be a minimum of two employees on site with first aid and CPR training to handle Life Threatening Injury. In the event of a life-threatening injury, the injured party shall be removed from the work areas as expeditiously as possible. 911 shall be called to

request medical assistance. The injured party removed and decontaminated as much as possible outside. Responding medical personnel shall be advised that the injured may be contaminated with PCB material as appropriate.

Non-Life Threatening Injury:

In the event of a minor non-life-threatening injury, the injured party shall exit through the decontamination unit following the proper exit decontamination procedures and proceed to medical assistance.

Heat Stress/Heat Stroke:

Heat stress and heat stroke are not expected to be a problem on this job. Cold potable water shall be always available on site.

Hurricane/Earthquake etc.:

In the event of a hurricane warnings or earthquakes, personnel shall secure any loose items outside the building and proceed to a designated evacuation area. Competent person shall account for all employees.

Coordination with Other Trades

Other trades shall be notified that the regulated area is off limits except for emergency situations coordinated with the onsite Competent Person.

Pre-Modernization / Demolition Inspection

Prior to modernization or demolition, the contractors' Competent person and industrial hygienist shall inspect all entities suspected of containing and/or contaminated with PCBs. A review of all light tubes will be conducted concurrently. The inspection will involve:

- Ensuring that all electrical current has been cut to electrical fixtures and transformers.
- Identifying and marking number and location of PCB containing electrical ballasts.
- Identifying and marking number and location of light tubes to be removed.
- Identifying the location of all work areas and equipment storage areas.
- Identify the location of waste storage prior to transport from the site.

PCBs, Universal Wastes, Other Regulated Materials (ORM)

- Identified universal wastes shall be appropriately removed, or recycled, or disposed of in accordance with the Department of Toxic Substances Control (DTSC) following strict adherence to the Title 22 of the California Code of Regulations.
- Assumed PCB containing equipment should be removed prior to renovation/demolition. The equipment should be inspected for "No-PCB's" or "PCB Free" labelling during removal. Any unlabeled equipment should be handled and disposed of as PCB containing waste.
- PCB-containing devices should be properly removed or have the oils removed, transported and recycled or disposed of at an approved recycling or waste disposal facility.

- PCB use, storage and disposal are regulated by the United States Environmental Protection Agency (USEPA) under the Toxic Substances Control Act (TSCA) and by Part 761, Title 40 of the Code of Federal Regulations (40 CFR Part 761). All materials or wastes that contain PCBs at concentrations of 10 ppm are regulated by TSCA.
- Assumed mercury containing equipment should be removed intact and disposed of by proper recycling prior to renovation/demolition.
- Electronic equipment should be removed intact and properly disposed of prior to renovation/demolition.
- Refrigerant containing equipment should have Chlorofluorocarbons (CFCs) extracted and properly disposed of prior to renovation/demolition.
- All hazardous materials activities must be performed in accordance with all applicable federal, state and local regulations.

DEVICES WITH POTENTIAL HAZARDOUS MATERIALS/OTHER REGULATED MATERIAL (ORM)

All associated devices, oils, liquids, refrigerants, and ORM materials must be handled, transported, and disposed/recycled in an EPA approved facility by persons with proper training in the handling of universal wastes and hazardous Materials as defined by DTSC, OSHA and the US EPA.

Special Hazard Precautions

When working with PCB containing materials, the following precautions shall always be adhered to:

- PCBs shall not be exposed to open flames or other sources of high temperature since to decomposition by-products may be produced.
- PCBs shall not be heated to temperatures of 100°C (212°F) or higher without approval. Smoking, eating and drinking are not permitted within 10 feet of the PCB control area.

Removal and Disposal of Electrical Ballasts (Only if needed)

If the existing light fixtures will be disturbed or removed, all fluorescent-ceiling fixtures will be checked from all construction areas prior to the first disturbance. The Contractor is required to inspect every ballast in each fixture and visually verify that each ballast is labeled "No PCBs" or is unlabeled and presumed to contain PCBs. Any ballast found during this process containing PCBs will be properly removed and disposed of as outlined in this specification. Prior to removal of the electrical ballasts, trained personnel shall dismantle the electrical fixtures, with care being taken so as not to cause any spills of PCB containing materials.

PCB Containing Electrical Ballasts PCB containing electrical ballasts shall be carefully removed and packaged separately by placing in DOT approved containers. The use of open top 55-gallon drums with lid and lock band is recommended. A start date must be annotated on a label at the time the first ballast is placed in a drum when the drums have

been filled, the removers will contact the owner point of contact and schedule a time to have a manifest signed and have the drums removed from the site. The containers shall be clearly labeled as containing PCB materials, manifested and transported to disposal at a permitted facility.

Examine each ballast to determine if oil has leaked, as identified by the presence of yellow oil or black tar like material on the outside of the ballasts. Any leaking PCB-containing ballasts or transformers shall be cracked and sealed in 6-mil plastic disposal bags and placed in a separate steel drum or other approved container. Each disposal drum or container will have a sufficient amount of oil-absorbent material placed in the bottom to absorb any oil from ballasts that are leaking or may leak during transport. Clip on connecting wires as close as possible to the ballasts. Do not bend back ends of ballasts. All personal protective clothing contaminated with PCB shall be disposed of accordingly.

Mercury Recommendations:

Fluorescent Bulbs and High-Intensity Flood Lights:

- All mercury-containing fluorescent bulbs and high-intensity discharge HID lamps, including flood lights, should be carefully removed to prevent breakage. These lamps can release mercury vapor if they are broken, posing a risk to both human health and the environment. It is crucial to wear appropriate personal protective equipment (PPE) such as gloves and eye protection, when handling these items. Additionally, facilities should provide employees with training on the safe removal and handling of mercury-containing lamps.
- Packaging these containers designed specifically for fragile bulbs, such as fiberboard or cardboard boxes with dividers to prevent movement during transport. Each container should be properly sealed, labeled as "Universal Waste – Mercury-Containing Lamps," and stored in a secure, ventilated area.
- Disposal. Dispose of all mercury-containing lamps according to universal waste regulations. In most jurisdictions, this includes following the guidelines outlined in California Code of Regulations, Title 22, Division 4, Chapter 23. Facilities should partner with an EPA-certified recycler that specializes in the handling and recycling of mercury-containing lamps to ensure compliance and environmental safety.

Thermostats, Timers, Pressure Gauges, and Switches:

- Devices such as thermostats, timers, pressure gauges, and switches that may contain mercury should be treated as mercury-containing universal waste. During removal, these devices must be handled with caution to prevent breakage or damage that could lead to a mercury spill. Personnel should be equipped with suitable PPE, such as chemical-resistant gloves and safety goggles, and should receive training on proper removal techniques.
- Packaging. Place all suspect devices in leak-proof, crush-resistant containers designed for hazardous materials. It is essential to label each container accurately, indicating that it contains "Universal Waste – Mercury-Containing Devices." Secure storage of these containers in a designated area, away from high-traffic zones, reduces the risk of accidental damage.

- All mercury containing fluorescent bulbs and high intensity flood lights should be carefully removed, packaged, and disposed of as mercury containing universal waste
- Remove, package, and dispose of all suspect thermostats, timers, pressure gauges, and switches as mercury containing universal waste

Draining Refrigerant from Refrigerated Units and HVAC Systems Prior to Demolition

Before the demolition of refrigerated units or HVAC systems, it is important to safely drain and recover all refrigerants to comply with environmental regulations and to protect the environment and worker safety. The following steps may be taken to safely drain refrigerants.

- Conduct a thorough inspection of all refrigerated units and HVAC systems scheduled for demolition to identify the type and quantity of refrigerants present. Prepare a demolition plan that includes refrigerant recovery as a key task. Ensure that all technicians handling the equipment are EPA-certified and trained in refrigerant recovery procedures as required under Section 608 of the Clean Air Act.
- Use EPA-approved recovery machines designed for the specific type of refrigerant being drained. The equipment should be capable of achieving the required evacuation levels based on the refrigerant type and equipment size. Properly maintained and regularly calibrated recovery equipment is essential to ensure efficiency and compliance.
- Before starting the recovery process, isolate the refrigerant lines by shutting off all relevant valves and disconnecting the power supply to the equipment. This helps to prevent accidental activation of the unit and potential refrigerant leaks.
- Connect the recovery machine to the unit's service ports and initiate the recovery process. Monitor the recovery machine's gauges to ensure that the refrigerant is being properly evacuated and stored in a certified recovery cylinder. Follow industry best practices and manufacturer guidelines for each type of refrigerant and equipment to achieve full recovery.
- It is illegal to vent refrigerants into the atmosphere due to their harmful environmental effects. Ensure that all recovery procedures adhere to EPA, State, and local regulations to prevent intentional or accidental releases.
- Once the refrigerant is fully recovered, transfer it to EPA-approved storage containers. Label the containers with relevant information, such as the type and quantity of refrigerant, to facilitate safe handling, transportation, and disposal. Verify that the storage containers are in good condition and have the necessary safety caps and labels.
- After the recovery process, perform a final leak check on the unit to confirm that no refrigerant remains in the system. This step is crucial to prevent unintended releases during the demolition process.

- Maintain accurate records of the refrigerant recovery process, including dates, quantities recovered, types of refrigerants, and disposal methods. These records are required for demonstrating regulatory compliance.
- Transport the recovered refrigerant to an EPA-certified recycling or disposal facility. Recycling facilities can reclaim the refrigerant to meet purity standards, allowing it to be reused in other applications. For refrigerants that cannot be reclaimed, ensure that they are disposed safely at a facility approved for handling hazardous substances.
- Communicate with the demolition team to confirm that all refrigerants have been fully drained and the units are safe for dismantling. Provide documentation verifying that the refrigerant recovery has been completed according to regulatory standards.

Draining and Removal of Generators and Transformers

- Conduct a thorough assessment of the generators and transformers to identify all potentially hazardous materials, such as oil, coolants, lubricants, and Polychlorinated Biphenyls (PCBs). Establish whether the transformer contains PCB-contaminated oil or non-PCB oils, as this will affect the handling and disposal procedures.
- Confirm that all activities comply with local, state, and federal regulations for hazardous materials handling and disposal. This includes obtaining any required permits and following guidelines set by the EPA, DOT, OSHA, CAL OSHA, DTSC, State, and local regulatory agencies.
- Disconnect all power sources from the generators and transformers to avoid electrical hazards. Isolate the units by disconnecting them from all electrical connections and grounding them to ensure the safety of personnel working on the draining and removal.
- Generators and transformers often contain fluids such as oil or coolants that need to be drained before removal. Follow these steps:
 - Use Spill Containment Measures. Set up spill containment measures, including using spill pans, absorbent materials, and secondary containment barriers, to prevent spills and leaks from contaminating the worksite.
 - Open the designated drainage valves or ports and use pumps if necessary to drain the fluids into approved containers. Ensure that the containers are clearly labeled, compatible with the fluids being collected, and meet the standards for hazardous waste storage. Handling of PCBs, special containers rated for hazardous waste must be used.
 - Seal and Label Containers. After draining, securely seal all containers and label them with the contents, date, and any relevant safety warnings.

Handling and Removal of Units

- Once the fluids are drained, the physical removal of generators and transformers can proceed.
 - Use Proper Lifting Equipment. Generators and transformers are heavy and may require specialized lifting equipment such as cranes, forklifts, or hoists. Only trained operators should ensure the safe removal of these units.

- Inspect for Residual Fluids Conduct an inspection of the units to check for any remaining residual fluids or contamination. If residues are found, conduct additional draining or cleaning as needed before transport.
- Package the drained units securely for transport to prevent movement or spilling during transit. Depending on their condition and contamination level, the units may need to be transported to a recycling facility or a hazardous waste disposal site. If the generators or transformers contain PCB-contaminated materials, they must be transported following EPA's Toxic Substances Control Act (TSCA), DOT, DTSC, State and local guidelines.
- After the removal of generators and transformers, clean and decontaminate the site to remove any traces of oil or hazardous substances. Use absorbent materials, spill response kits, and approved cleaning agents. Collect and dispose of all cleaning materials following hazardous waste regulations.
- The drained fluids, including oil or coolant, should be disposed of or recycled at an EPA-approved facility. Non-PCB oils may be recycled, while PCB-contaminated fluids must be disposed of at a facility certified for PCB waste.
- Maintain accurate records of all activities, including fluid volumes drained, transport documentation, disposal certificates, and any safety measures taken. This documentation should be retained for regulatory compliance.
- Ensure that all personnel involved in draining and removing generators and transformers receive proper training on the handling of hazardous materials and emergency procedures in case of spills or accidents. Conduct periodic safety briefings and review site-specific hazards.

Personnel Requirements for Handling Hazardous and Regulated Materials

Only personnel who have received **OSHA HAZWOPER 40-hour specialized training** in the safe handling, management, and disposal of **PCB-containing materials, universal wastes, refrigerants, and other regulated materials (ORMs)** shall be permitted access to designated work areas. The training program must be developed and conducted by a **competent person** to ensure full adherence to all relevant regulatory standards. This training program must cover the following critical areas:

1. Personnel must be trained to identify various hazardous materials, including PCBs, universal waste (e.g., batteries, fluorescent lamps, mercury-containing devices, refrigerants, and other regulated substances). The training should cover the specific health risks, environmental impacts, and safety considerations associated with each type of material.
 - **PCB-Containing Materials:** Personnel must be trained to recognize and understand the hazards associated with Polychlorinated Biphenyls (PCBs), including their toxicological effects and environmental risks. The training should include recognizing common PCB-containing equipment, such as transformers, capacitors, ballasts, and other electrical components.
 - **Universal Wastes:** Training should cover the identification of universal wastes, such as batteries, fluorescent lamps, mercury-containing devices, electronic waste (e-waste), and any other universal waste identified by the Department of Toxic Substances Control (DTSC) or equivalent regulatory bodies.

substances. The Contractor shall ensure that all required PPE is provided, maintained, and worn consistently by all personnel in designated work areas. Each worker shall be provided with the appropriate personal protective equipment (PPE) as required by OSHA Regulations, PPE shall include, but not be limited to, the following:

- ✓ Disposable chemical resistant coveralls
- ✓ Chemically resistant gloves over nitrile disposable gloves
- ✓ Disposable boot covers
- ✓ Full-face mask cartridge respirator
- ✓ Eye protection
- ✓ Hand/waist and Eye Wash Stations

Surveillance Personnel: Surveillance personnel may enter a PCB control area for brief periods of time provided they wear disposable polyethylene gloves and disposable polyethylene boot covers, as a minimum. Additional protective equipment may be required if respiratory hazard is involved or if skin contact with PCB is involved.

Execution of Removal PCB Ballast, PCB Transformers, Fluorescent Light Tubes

Salvage operations includes removal and recycling shall commence prior to abatement and demolition/renovation as feasible.

Shut down and lock out electrical power to all work areas as necessary. The Contractor shall provide temporary power and lighting and ensure safe installation of temporary power services and equipment as specified in applicable electrical code requirements.

The Contractor shall use a California licensed electrician to isolate all electrical sources from lighting fixtures, emergency lighting, switches, gauges, pumps, vacuums, mechanical equipment, etc. prior to removal of ballast's, light tubes, oils, fluids, etc. Isolation and disconnection of any other equipment/system to accomplish work shall be the responsibility of the Contractor.

Ballast having labels with the words "NO PCBs" or labels with similar words having the same meaning, may be disposed of with the light fixture. All other ballast, unlabeled PCB-containing ballasts and transformers, regardless of age, will be assumed to contain PCB. Ballast containing, or assumed to contain, PCB may be removed from mounted light fixtures, or the entire light fixture may be removed and taken to a ballast removal area. Floor covering requirements must be met if ballast is removed from mounted fixtures, and ballast shall not be dropped, thrown, or mishandled. Segregate materials shall be segregated based on constituent, condition and proposed disposal/recycling point. All PCB-containing ballasts and transformers will be removed and placed into 55-gallon steel drums or other DOT-approved containers appropriately labeled in accordance with EPA, DTSC and DOT regulations.

Establish a designated staging area for temporary placement of hazardous materials. Cover the floor with one 1/4" layer of 6-mil nitrile sheeting as a drop cloth, taped down. The sheeting shall be sealed at the joints and shall extend 3 feet beyond the work area.

Damaged, holed, or torn sheeting shall be resealed before ballast removal work continues or resumes. The purpose of the sheeting is to contain spills.

Removal of Leaking Ballast (only if needed) The Contractor shall remove lamps from fixtures. Lamps shall remain intact, unbroken, and shall be placed carefully into cardboard containers designed to hold lamps preferably obtained from the manufacturer or lamp recycling facility. Special care shall be taken not to break tubes during removal, handling and transport.

The Contractor shall use EPA vacuum and thoroughly decontaminate any areas where lamps are accidentally broken.

Ballast removal shall be immediately discontinued if any sign of black tar-like or yellow oil-like substances are discovered on a ballast, light fixture, or cover. The Contractor shall don a Ty-Vek suit, along with the rubber gloves and eye protection before continuing work. Light fixtures, covers, and ballast with the black tar-like substance shall be soaked and wet wiped with an approved solvent until clean and no visible signs of the tar-like substance remain. These solvents must be submitted, for approval, to the owner prior to use.

All precautions shall be taken to prevent PCB spills/leakage into the environment. In the case of a PCB spill and/or leakage the Contractor shall immediately notify the owner. If the spill is estimated to be in excess of one pound, the local fire department and county environmental compliance department shall also be immediately notified. A PCB spill kit shall always be kept on-site in the immediate vicinity of PCB work areas. Personnel trained in managing and controlling PCB spills/leakage shall undertake the handling of such situations.

In case of PCB spill and/or leak the Contractor shall also:

Roll off an area around the edges of a PCB leak or spill and post a "PCB Spill Authorized Personnel Only" caution sign, immediately transfer leaking items to a drip pan or other container, initiate cleanup of spill as soon as possible, but no later than 8 hours of its discovery, and properly contained and disposed of as solid PCB waste.

Any and all cleanup shall be documented with records of decontamination in accordance with applicable cleanup rules and regulations.

Disposal

Disposal of oil or tar-like substance cleaning materials. The remover shall place all tar-like substance residue and materials with the tarlike substance on them such as Ty-Vek suits, disposable sweaters, rags, and floor covering in a separate steel drum. The external surface of all drums, lids, and lock bands shall be thoroughly cleaned of all tar-like substances, labeled and sealed.

Disposal of The Drums. Arrange for the transport of all properly containerized PCB-containing ballasts to an EPA-approved recycling/disposal facility. The Contractor shall completely inform all local state and federal agencies as it relates to the disposal of the PCB drummed materials. The drums containing PCB ballast and those containing rags, toiles, residue, etc. will be transported and properly disposed of as PCB waste.

The Contractor is responsible for determining and complying with all current applicable regulations pertaining to hazardous waste handling, transport, and disposal of PCB-

containing ballasts and transformers. Copies of completed original waste shipment records manifests documenting the proper transport, recycling, or incineration of non-recycled components shall be provided to the owner upon project completion. The Contractor shall also obtain and provide documentation to the owner that the recycling/disposal facility has all the required permits and approvals necessary for operations involving recycling and disposing of PCB-containing equipment.

Disposal of Fluorescent and Other Universal Lamps - Only if needed (light Tubes)

Background The U.S. Environmental Protection Agency (EPA) has promulgated regulations governing the accumulation and disposal of universal waste lamps.

The scope of work for the abatement contractor includes the removal and recycling of all fluorescent lamps, mercury vapor bulbs, and high intensity discharge (HID) bulbs from lighting fixtures. Fluorescent lamps, mercury vapor bulbs, and HID bulbs shall be removed prior to starting demolition, properly packaged to prevent breakage, and transported intact to an EPA-approved recycling facility. Contractors responsible for the removal and recycling of the fluorescent lamps, mercury vapor bulbs, and HID bulbs shall handle and manage them in accordance with all local, state, and federal regulations.

All fluorescent-ceiling fixtures will be checked from all construction areas prior to the first disturbance. All the light tubes will be carefully removed from the fixture as not to break the tubes and set aside in a pre-approved secured area prior to disposal. All mercury containing light tubes will be properly removed, stored, and disposed following all local, state, and federal guidelines. Containers for disposal of waste fluorescent lamps shall be pre-approved by the consultant.

Lamp Removal Assume all fluorescent lamps associated with this project, regardless of age, are harmful to the environment. The contractor will provide the containers for disposal of the lamps. After all waste lamps have been placed in the containers, identification and placard labels shall be placed on each container.

- Carefully remove lamps and bulbs from fixtures. Lamps and bulbs shall remain intact/unbroken and shall be carefully placed into cardboard containers designed to hold them preferably original boxes obtained from the manufacturer or special boxes obtained from a lamp recycler.
- Broken lamps and bulbs should still be recycled. However, if they are not acceptable to the recycling facility, they must be evaluated to determine if they are hazardous waste. Remove and discard residues from broken lamps and bulbs promptly. Personnel cleaning up spills should have appropriate training, cleanup equipment, and wear appropriate personal protective equipment. Acceptable storage for broken, damaged, or leaking lamps and bulbs include a closed 55-gallon steel drum or a closed cardboard drum.
- Store boxed lamps and bulbs in a secure area and limit access to personnel qualified to handle them.
- Contact an EPA-approved lamp recycler and arrange for transport of the properly packaged and labeled lamps and bulbs to the recycler.

- A manifest must be prepared when fluorescent lamps and PCB waste and other universal waste/ORM materials outlined are offered for transport for on-site treatment, storage, and recycling. The waste manifest fulfills requirements for a material's Bill of Lading. Waste Manifests shall be properly completed by the Contractor for each waste shipment and shall list each transportation container including any non-hazardous waste or hazardous materials shipped. The manifest shall contain all information required by applicable federal, State, and local hazardous waste or materials regulations. The Contractor shall provide all data required for waste transportation, treatment, and recycling, and for completion of hazardous waste or material generator report as required by the regulatory agency of jurisdiction.
- A shipping label containing the appropriate address information shall be prepared and placed on top of the shipping drum/box/container and covered with transparent adhesive tape.
- Recycling of all selected materials shall be in accordance with all federal, State, and local regulations.
- The Contractor and the Transporter must comply with the DOT Emergency Response Communication Standards applicable to the shipment of hazardous materials.
- Submit copies of the original shipment records documenting proper transport, recycling, and proper disposal of any non-recycled components to the owner upon project completion.

Mercury-Containing Thermostats and Electrical Switches (if discovered during demolition activities)

The Contractor shall inspect every thermostat and electrical switch for the presence of liquid mercury. Thermostats and electrical switches that contain mercury shall be carefully removed in accordance with the EPA - Hazardous Waste "Universal Waste" Guidance Documents and regulations, from their mounted position, wrapped to prevent breakage, and placed in a sealable, rigid, labeled container with absorbent material in the bottom. The Contractor shall arrange to have the mercury properly transported to and recycled by an authorized recycling facility. Provide to the owner, copies of shipping papers, manifest, and documentation demonstrating that the mercury has been properly transported and delivered to an approved recycling/disposal facility upon project completion. All mercury containing materials will be properly removed, stored, and disposed of following all local, state, and federal guidelines and current regulations.

Nickel-Cadmium, Lead-Acid, and Other Metal-Containing Batteries, Nuclear Power Source, Emergency Lighting

The Contractor shall check all batteries in emergency lighting fixtures, emergency exit signs, generators and battery charging systems, and other electrical equipment or components for batteries that may contain heavy-metals. This also includes any emergency lighting that has a nuclear power source. All batteries shall be removed in accordance with the EPA - Hazardous Waste "Universal Waste" Guidance Documents and regulations and placed in a separate sealable container and delivered to an approved recycling/disposal facility. Provide to the owner documentation demonstrating that all batteries containing hazardous components have been properly removed,

transported, and disposed upon project completion following all local, state, and federal guidelines and current regulations.

DEVICES WITH POTENTIAL HAZARDOUS MATERIALS/OTHER REGULATED MATERIAL (ORM)

All associated devices, oils, liquids, refrigerants, and ORM materials must be handled, transported, and disposed/recycled in an EPA approved facility by persons with proper training in the handling of universal wastes and Hazardous Materials as defined by DTSC, OSHA and the US EPA.

The Contractor shall remove from the premises all regulated and general waste following all removal, transport, and disposal codes and regulations for each of the waste materials encountered. Transport all property containerized lamps, ballasts, and transformers to an approved recycling facility. The Contractor shall be responsible for determining and complying with all current applicable regulations to waste handling and transport of PCB-containing ballast's, transformers, mercury-containing lamps and ORMs. Proper personal protective equipment (PPE) will need to be in place during the cleanup and removal of human waste hazards and rotted foods.

The original waste shipment record documenting proper transport, recycling, and incineration of unrecycled components like PCB-containing solids and liquids shall be completed and submitted to Owner's Representative upon project completion. No hazardous waste will be stored at the project site for more than 90 days from the date of first accumulation.

RECYCLING OF NON-HAZARDOUS AND HAZARDOUS MATERIALS

All materials regardless of hazard classification shall be manifested for recycling and shall be recycled in accordance with all applicable federal, State, and local regulations.

- Contact EPA, State, and local authorities to determine specific material recycling requirements.
- The recycler will be required to properly store and secure waste at all times. No debris shall be left at the site or in uncovered or unlocked trucks or dumpsters.

Recycling of Hazardous Liquid or Solid Wastes

- Comply with federal, RCRA, State, DTSC, and local regulations.
- Retain all project documents provided by the recycling site.
- At completion of hauling and recycling of each load submit a copy of the Uniform Hazardous Waste Manifest to the Owner.

END OF SECTION III

SECTION 02 41 16
STRUCTURE DEMOLITION
PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Demolition and removal of buildings and site improvements.
 - 2. Removing below-grade construction.
 - 3. Disconnecting, capping or sealing, and abandoning in-place site utilities.
- B. Related Requirements:
 - 1. Section 01 11 00 "Summary" for use of the premises and phasing requirements.
 - 2. Section 01 45 33 "Asbestos Abatement Observation" for observations procedures during abatement of hazardous materials in buildings.
 - 3. 01 51 00 "Temporary Facilities and Controls" for temporary facilities during demolition.
 - 4. Section 01 74 19 "Construction Waste Management" for waste management during demolition.
 - 5. Section 01 74 20 "Recycled Content Certification" for recycling during demolition.
 - 6. Sections 02 08 00.1 and 02 08 00.2 Hazardous Materials Abatement" for abatement of hazardous materials in buildings.
 - 7. 02 60 00 "Air Pollution and Soil Management Plan" for air pollution controls and soil management procedures during demolition.
 - 8. Section 31 10 00 "Site Clearing" for site clearing and removal of above- and below-grade site improvements not part of building demolition.

1.2 DEFINITIONS

- A. Remove: Detach items from existing construction and dispose of them off-site unless indicated to be salvaged.
- B. Remove and Salvage: Detach items from existing construction, in a manner to prevent damage, and deliver to Owner.

1.3 MATERIALS OWNERSHIP

- A. Unless otherwise indicated, demolition waste becomes property of Contractor.

1.4 PREINSTALLATION MEETINGS

- A. Pre-demolition Conference: Conduct conference at Project site.
 - 1. Inspect and discuss condition of construction to be demolished.
 - 2. Review structural load limitations of existing structures.
 - 3. Review and finalize building demolition schedule and verify availability of demolition personnel, equipment, and facilities needed to make progress and avoid delays.
 - 4. Review and finalize protection requirements.
 - 5. Review procedures for control of traffic, noise control and dust.
 - 6. Review procedures for protection of adjacent buildings, and street.
 - 7. Review items to be salvaged and returned to Owner.

STRUCTURE DEMOLITION

1.5 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For refrigerant recovery technician.
- B. Proposed Protection Measures: Submit report, including Drawings, that indicates the measures proposed for protecting individuals and property, for environmental protection, for dust control, and for noise control. Indicate proposed locations and construction of barriers.
- C. Schedule of Building Demolition Activities: Indicate the following. Comply with Section 01 32 16 Progress Schedules and Reports".
 - 1. Detailed sequence of demolition work, with starting and ending dates for each activity.
 - 2. Temporary interruption of utility services.
 - 3. Shutoff and capping of utility services.
- D. Pre-demolition Photographs or Video: Show existing conditions of adjoining construction and site improvements, including finish surfaces, that might be misconstrued as damage caused by salvage and demolition operations. Comply with Section 013233 "Photographic Documentation." Submit before the Work begins.
- E. Statement of Refrigerant Recovery: Signed by refrigerant recovery technician responsible for recovering refrigerant, stating that all refrigerant that was present was recovered and that recovery was performed according to EPA regulations. Include name and address of technician and date refrigerant was recovered.

1.6 CLOSEOUT SUBMITTALS

- A. Inventory: Submit a list of items that have been removed and salvaged.
- B. Construction Waste Management: Submit reports.
- C. Recycled Content Certification: Submit reports.
- D. Construction waste report, waste management report, recycled content certification worksheet.

1.7 QUALITY ASSURANCE

- A. Refrigerant Recovery Technician Qualifications: Certified by EPA-approved certification program.

1.8 FIELD CONDITIONS

- A. Existing building at 1301 State Street is considered dilapidated and unsafe.
- B. Buildings to be demolished are vacated and their use discontinued.
- C. Buildings in vicinity to demolition area will be occupied. Conduct building demolition so operations of occupied buildings will not be disrupted.

1. Provide not less than 72 hours notice of activities that will affect operations of adjacent occupied buildings.
 2. Maintain access to existing walkways, exits, and other facilities used by occupants of adjacent buildings. Maintain traffic control.
 - a. Do not close or obstruct walkways, exits, or other facilities used by occupants of adjacent buildings without written permission from authorities having jurisdiction.
 3. Maintain dust mitigation measures.
- D. Hazardous Materials: Present in buildings and structures to be demolished. A report on the presence of hazardous materials in Book II for review and use. Examine report to become aware of locations where hazardous materials are present.
1. Hazardous material remediation is specified elsewhere in the Contract Documents.
 2. Do not disturb hazardous materials or items suspected of containing hazardous materials except under procedures specified elsewhere in the Contract Documents.
 3. The entire building at 1301 State Street and contents are considered hazardous waste.
- E. On-site storage or sale of removed items or materials is not permitted.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

- A. Regulatory Requirements: Comply with governing EPA notification regulations before beginning demolition. Comply with hauling and disposal regulations of authorities having jurisdiction.
- B. Standards: Comply with ANSI/ASSP A10.6 and NFPA 241.

2.2 SOIL MATERIALS

- A. Satisfactory Soils: Comply with requirements in Section 31 20 00 "Earth Moving."

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verify that utilities have been disconnected and capped before starting demolition operations.

- B. Review Project Record Documents of existing construction or other existing condition and hazardous material information provided by Owner. Owner does not guarantee that existing conditions are same as those indicated in Project Record Documents.
- C. Engage a professional engineer to perform an engineering survey of condition of building to determine whether removing any element might result in structural deficiency or unplanned collapse of any portion of structure or adjacent structures during building demolition operations.

- 1. Existing building at 1301 State Street is considered dilapidated and unsafe.
- 2.

3.2 PREPARATION

- A. Refrigerant: Before starting demolition, remove refrigerant from mechanical equipment according to 40 CFR 82 and regulations of authorities having jurisdiction.

3.3 UTILITY SERVICES AND MECHANICAL/ELECTRICAL SYSTEMS

- A. Existing Utilities to Be Disconnected: Locate, identify, disconnect, and seal or cap off utilities serving buildings and structures to be demolished.
 - 1. Arrange to shut off utilities with utility companies.
 - 2. If removal, relocation, or abandonment of utility services will affect adjacent occupied buildings, then provide temporary utilities that bypass buildings and structures to be demolished and that maintain continuity of service to other buildings and structures.
 - 3. Cut off pipe or conduit a minimum of 24 inches below grade. Cap, valve, or plug and seal remaining portion of pipe or conduit after bypassing according to requirements of authorities having jurisdiction.
 - 4. Do not start demolition work until utility disconnecting and sealing have been completed and verified in writing.

3.4 PROTECTION

- A. Existing Facilities: Protect adjacent walkways.
- B. Temporary Shoring: Provide and maintain interior and exterior shoring, bracing, or structural support to preserve stability and prevent unexpected movement or collapse of construction being demolished.
 - 1. Strengthen or add new supports when required during progress of demolition.
- C. Existing Utilities: Maintain and protect from damage utility services to be utilized during demolition operations.

- D. Temporary Protection: Erect temporary protection, such as walks, fences, railings, canopies, and covered passageways, where required by authorities having jurisdiction and as indicated. Comply with requirements in Section 01 50 00 "Temporary Facilities and Controls."
1. Protect adjacent buildings and facilities from damage due to demolition activities.
 2. Protect existing site improvements, appurtenances, and landscaping to remain.
 3. Erect a plainly visible fence around drip line of individual trees or around perimeter drip line of groups of trees to remain.
 4. Provide temporary barricades and other protection required to prevent injury to people and damage to adjacent buildings and facilities to remain.
 5. Provide protection to ensure safe passage of people around building demolition area and to and from occupied portions of adjacent buildings and structures.
 6. Protect walls, windows, roofs, and other adjacent exterior construction that are to remain and that are exposed to building demolition operations.
 7. Erect and maintain dustproof partitions and temporary enclosures to limit dust, noise, and dirt migration to occupied portions of adjacent buildings.
- E. Remove temporary barriers and protections where hazards no longer exist. Where open excavations or other hazardous conditions remain, leave temporary barriers and protections in place.

3.5 DEMOLITION, GENERAL

- A. General: Demolish indicated buildings and site improvements completely. Use methods required to complete the Work within limitations of governing regulations and as follows:
1. Do not use cutting torches until work area is cleared of flammable materials. Maintain portable fire-suppression devices during flame-cutting operations.
 2. Maintain fire watch during and after flame-cutting operations.
 3. Maintain adequate ventilation when using cutting torches.
 4. Locate building demolition equipment and remove debris and materials so as not to impose excessive loads on supporting walls, floors, or framing.
- B. Site Access and Temporary Controls: Conduct building demolition and debris-removal operations to ensure minimum interference with roads, streets, walks, walkways, and other adjacent occupied and used facilities.
1. Do not close or obstruct streets, walks, walkways, or other adjacent occupied or used facilities without permission from Owner and authorities having jurisdiction. Provide alternate routes around closed or obstructed trafficways if required by authorities having jurisdiction.
 2. Use water mist and other suitable methods to limit spread of dust and dirt. Comply with governing environmental-protection regulations. Do not use water when it may damage adjacent construction or create hazardous or objectionable conditions, such as ice, flooding, and pollution.

- C. Explosives: Use of explosives is not permitted.

3.6 DEMOLITION BY MECHANICAL MEANS

- A. Proceed with demolition of structural framing members systematically, from higher to lower level. Complete building demolition operations above each floor or tier before disturbing supporting members on the next lower level.
- B. Remove debris from elevated portions of the building by chute, hoist, or other device that will convey debris to grade level in a controlled descent.
 - 1. Remove structural framing members and lower to ground by method suitable to minimize ground impact and dust generation.
- C. Below-Grade Construction: Demolish below-grade construction.
 - 1. Remove below-grade construction, including footings, to at least 6 inches below grade.
- D. Existing Utilities: Remove and Abandon existing utilities and below-grade utility structures as outlined in Civil plans. Cut utilities flush with grade. Cap utilities.
- E. Hydraulic Car Lift System: Demolish and remove car lift system, including cylinder, plunger, well assembly, steel well casing and liner, oil supply lines, and tanks.

3.7 CONSTRUCTION FUGITIVE DUST CONTROL

- A. The project is required to incorporate standard best management practices (BMPs) during construction to reduce emissions of fugitive dust. San Diego Air Pollution Control District (SDAPCD) Rule 55 – Fugitive Dust Control states that no dust and/or dirt shall leave the property line. SDAPCD Rule 55 requires the following (SDAPCD 2009):
 - 1. Airborne Dust Beyond the Property Line: No person shall engage in construction or demolition activity subject to this rule in a manner that discharges visible dust emissions into the atmosphere beyond the property line for a period or periods aggregating more than 3 minutes in any 60 minute period
 - 2. Track-Out/Carry-Out: Visible roadway dust as a result of active operations, spillage from transport trucks, erosion, or track-out/carry-out shall:
 - a. Be minimized by the use of any of the following or equally effective track-out/carry-out and erosion control measures that apply to the project or operation.
 - 1) track-out grates or gravel beds at each egress point.

- 2) wheel-washing at each egress during muddy conditions, soil binders, chemical soil stabilizers, geotextiles, mulching, or seeding; and for outbound transport trucks.
 - 3) using secured tarps or cargo covering, watering, or treating of transported material; and
- b. Be removed at the conclusion of each workday when active operations cease, or every 24 hours for continuous operations. If a street sweeper is used to remove any track-out/carry-out, only PM10-efficient (particulate matter less than 10 microns) street sweepers certified to meet the most current South Coast Air Quality Management District (SCAQMD) Rule 1186 requirements shall be used. The use of blowers for removal of track-out/carry-out is prohibited under any circumstances
- B. To meet Rule 55 requirements, the project would implement the BMPs listed below:
1. A minimum of two applications of water during grading between dozer/scrapper passes
 2. Termination of grading if winds exceed 25 miles per hour (mph);
 3. Maintenance of a minimum soil moisture of 12 percent in all exposed surfaces
 4. Stabilization of dirt storage piles by chemical binders, tarps, fencing, or other erosion control; and
 5. Vehicle speeds would be limited on unpaved roads to 15 mph
- C. Additionally, the project will comply with the City's mandated dust control measures and will implement BMPs to control fugitive dust to meet the requirement of SDAPCD Rule 51. The project will also implement the USEPA off-road equipment standards and CARB regulations, which require the use of PM filters or technology to reduce exhaust PM emissions, and SDAPCD Rule 67.0.1, which requires that all standard flat and non-flat paints are required to be low VOC (50 g/L or less VOC content).

3.8 ARCHEOLOGICAL RESOURCES MONITORING AND AVOIDANCE

- A. DGS will retain an Archeologist and Tribal Monitor to monitor ground disturbing activities.
- B. Prior to ground disturbing activities, Contractor shall arrange a preconstruction meeting that shall include the Archeologist, Tribal consultant/monitor, DGS, Construction

STRUCTURE DEMOLITION

Manager and/or Grading Contractor, Resident Engineer, and Building Inspector, if appropriate.

- C. The qualified Archaeologist and Tribal Monitor shall attend any grading/excavation related preconstruction meetings to make comments and/or suggestions concerning the Archaeological Monitoring program with the Contractor. The Archaeological Monitor and Tribal Monitor shall be present full time during all soil disturbing and grading/excavation/trenching activities which could result in impacts to archaeological resources and shall document all field activity to be submitted to DGS.
- D. In the event of a discovery, the Archaeological Monitor shall direct the contractor to temporarily divert all soil disturbing activities, including but not limited to digging, trenching, excavating, or grading activities in the area of discovery and in the area reasonably suspected to overlay adjacent resources and immediately notify the Resident Engineer, and Building Inspector, as appropriate. No soil shall be exported off-site until a determination can be made regarding the significance of the resource specifically if Native American resources are encountered.
- E. The Archaeological Monitor and Tribal consultant/monitor, where Native American resources are discovered shall evaluate the significance of the resource. If the resource is significant, the Archaeological Monitor shall submit applicable significance documentation which has been reviewed by the Tribal consultant/monitor and obtain written approval from DGS. The significance of the resource must be determined before ground disturbing activities in the area of discovery will be allowed to resume.
- F. If human remains are discovered on the site, project construction activities would be required to comply with California Health and Safety Code Section 7050.5 and Public Resources Code Section 5097.98. Specifically, if human remains are discovered, the San Diego County Coroner shall be immediately contacted for a determination of origin and disposition pursuant to Public Resources Code Section 5097.98.
- G. After construction has been completed the Archaeological Monitor shall submit a Final Monitoring Report to DGS, which has been reviewed by the Tribal consultant/monitor, and obtain written approval from DGS.

3.9 NOISE ATTENUATION MEASURES

- A. The project will comply with all applicable regulations found within the City's Noise Abatement and Control Ordinance (SDMC Section 59.5.0101) and Title 24 of the California Building Code.

3.10 SITE RESTORATION

- A. Below-Grade Areas: Rough grade below-grade areas. Partially fill below-grade areas and voids resulting from building demolition operations with satisfactory soil materials to backfill requirements in Section 31 20 00 "Earth Moving."
- B. Site Grading: Uniformly rough grade area of demolished construction to a smooth surface, free from irregular surface changes. Provide a smooth transition between adjacent existing grades and new grades.

3.11 REPAIRS

- A. Promptly repair damage to adjacent buildings caused by demolition operations.

3.12 DISPOSAL OF DEMOLISHED MATERIALS

- A. Remove demolition waste materials from Project site and dispose of them according to Section 02 08 00 "Hazardous Materials Abatement", recycle or dispose of them according to Section 017419 "Construction Waste Management and Disposal."
 - 1. Do not allow demolished materials to accumulate on-site.
 - 2. Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.
- B. Do not burn demolished materials.

3.13 CLEANING

- A. Clean adjacent structures and improvements of dust, dirt, and debris caused by building demolition operations. Return adjacent areas to condition existing before building demolition operations began.
 - 1. Clean roadways of debris caused by debris transport.

END OF SECTION 02 41 16



SECTION 02 60 00

AIR POLLUTION AND SOIL MANAGEMENT PLAN

**SAN DIEGO AFFORDABLE HOUSING PROJECT
FORMER SAN DIEGO TRANSAMERICA BUILDING (804)
1301 STATE STREET
SAN DIEGO, CALIFORNIA 92101**

PREPARED FOR:

**APTIM
ATTN: TOMAS PERINA
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BATON ROUGE, LOUISIANA 70809**

TASK ORDER No.: TO36

PREPARED BY:

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AIR POLLUTION AND SOIL MANAGEMENT PLAN
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1.0 PROJECT BACKGROUND

1.1 INTRODUCTION

On behalf of the Department of General Services (DGS), Real Estate Services, and APTIM, Client of DGS, Titan Environmental Solutions, Incorporated (TES) has prepared this Air Pollution and Soil Management Plan for the San Diego Affordable Housing Project. The Project area consists of the former San Diego Transamerica Building #800, located at 1301 State Street, San Diego, California 92101 referred to as the Subject Property. TES understands that the proposed development project will include the demolition of Subject Property.

Due to the historical land use of the Subject Property, it is plausible that soil impacted by previous activities may still be present and could potentially be uncovered during the course of demolition and excavation operations. This Air Pollution and Soil Management Plan (APSMP) includes real-time monitoring of various airborne contaminants such as asbestos, lead, mercury, polychlorinated biphenyls, total petroleum hydrocarbons and particulate matter. Additionally, it details the procedures to be adhered to when engaging in earthwork activities, including the proper identification, excavation, transportation, and disposal of contaminated soil that may be encountered during these operations.

The primary objective of the APSMP is to ensure the safety and well-being of the surrounding community, which includes on-site receptors such as residences and businesses, as well as on-site workers who are not directly involved in the subject work activities. This protective measure is essential to prevent potential releases of airborne contaminants, which may occur during construction and demolition work activities, as well as during monitoring procedures. The APSMP is equipped with action levels that trigger heightened monitoring, necessitate corrective actions to mitigate emissions, and, in extreme cases, mandate work stoppage. Additionally, this plan serves the crucial purpose of confirming that work activities do not facilitate the spread of contamination beyond the work site via airborne pathways.

1.2 SITE LOCATIONS

The Site include the following impacted areas:

1. The former San Diego Transamerica Building #800, located at 1301 State Street,



San Diego, California 92101, is a two-story office building constructed on a slab foundation. The building is primarily constructed with concrete masonry units (CMU) that are finished with exterior stucco materials.

1.3 SCOPE OF WORK

The primary aim of the APSMP is to oversee and monitor the potential off-site dispersion of airborne contaminants while building demolition operations are underway. The APSMP is designed to fulfill various objectives, including safeguarding both human health and environment, assessing dust generation, gauging the efficiency of dust suppression measures, and maintaining a record of air quality throughout the demolition activities, particularly in neighboring communities and areas with vulnerable populations.

The scope of work for the APSMP includes a range of activities, with the initial step being:

1. Develop and implement an Air Pollution and Soil Management Plan (APSMP).



2.0 AIR POLLUTION AND SOIL MANAGEMENT PLAN OVERVIEW

2.1 PROGRAM OBJECTIVE

There are four primary objectives of this APSMP:

1. Safeguard human health and the environment
2. Prevent the dispersion of asbestos, lead, mercury, PCBs, TP in the gasoline range (TP-g), diesel range (TP-d), and oil range (TP-o) contaminant into the surrounding soil during the demolition and excavation process
3. Evaluate the effectiveness of dust suppression controls and determine when additional controls are required
- Details the procedures to be adhered to when engaging in earthwork activities
- Document air quality during demolition and excavation activities

2.2 POTENTIAL CONTAMINANTS OF CONCERN

This section describes the potential contaminants of concern that may be encountered in soil during the demolition activities at the Subject Property. Based on the review of the Phase 1 Environmental Site Assessment, prepared by AVOCET Environmental, Inc., dated May 22, 2020, petroleum hydrocarbons and solvents related to vehicle maintenance were likely to have been used at the site. Additionally, asbestos, lead, and PCBs are contaminants of concern.

2.3 PROGRAM OVERVIEW

The monitoring activities stipulated in this APSMP will be executed as detailed below:

- The first phase of sampling will establish baseline or background concentrations at the site locations prior to demolition activities. Baseline conditions will be determined utilizing real-time data for particulate matter (PM) and laboratory data for asbestos, lead, mercury, PCBs and TP's, which shall be collected at least two (2) days before the start of work. During establishment of baseline conditions, dust monitoring stations will be set up and visual inspections will be performed. This information will be used to place dust control equipment in locations that will be the most effective in stopping generated dust conditions.
- The second phase of sampling will be conducted during the daily



Construction/demolition tasks to document ambient air conditions at the site perimeter and to compare these conditions to the established action level criteria determined for the site. This will include daily real-time air sample collection for the documentation of conditions at the property boundary during demolition activities and laboratory data for asbestos, lead, mercury, PCBs and TPBs.

Real-time particulate matter dust data shall be collected from the four cardinal directions including one downwind point upwind of the site location and one downwind point downwind of the site location.

The location and number of the monitoring locations may change from day to day depending on site activities and meteorological conditions. During activities, sampling points may provide coverage for more than one of the criteria listed above. A single sampling point may be used for monitoring the east side of the building and the downwind sampling point.

Dust monitoring will be conducted utilizing direct reading aerosol particulate matter equipment capable of continuous air flow monitoring. As described herein, ambient air samples will also be collected downwind of demolition activities and analyzed for asbestos and heavy metals including but not limited to lead and mercury, and PCBs, and soil samples to be analyzed for asbestos, heavy metals, PCBs and TPBs. Additionally, meteorological parameters consisting of wind speed, wind direction, temperature and relative humidity will be monitored.

Based on regulatory guidance and Division of Occupational Safety and Health of California (Cal/OSHA's time-weighted average (TWA) Permissible Exposure Limits (PELs) and consensus guidance of the National Institute for Occupational Safety and Health (NIOSH) Recommended Exposure Limits (RELs), perimeter air quality Action Levels (AL) for Particulate Matter, Asbestos and Heavy Metals are summarized in Table 2-1 below.



Table 2-1				
Perimeter Action Levels for Airborne Particulate Matter, Asbestos, Lead, Mercury, Oil Mist and PCBs				
	Particulate Matter	Asbestos	Heavy Metals	PCBs and Oil Mist
Activity	During Demolition and Excavation Activities			
Action Level	0.045 mg/m³ greater than background 30 min avg or earth moving or less than 0.045 mg/m³ yards, OR 2.0 mg/m³ greater than background 30 min avg or earth moving or equal to or more than 0.045 mg/m³ yards, OR Persistent visible fugitive dust is leaving the site	The Action Levels for Asbestos, Lead, Mercury, PCBs and Oil Mist - Asbestos 0.01 mg/m³ - PCBs 0.045 mg/m³ - Mercury 2.0 mg/m³ - Lead 3.0 mg/m³ - Oil Mist 0.045 mg/m³		
Response	If the action level concentration is reached downwind, confirm background level at the working site. Particulate exceeds the action level, implement dust suppression techniques.			
Stop Work Limit	0.045 mg/m³ greater than background 30 min avg or earth moving or less than 0.045 mg/m³ yards, OR 2.0 mg/m³ greater than background 30 min avg or earth moving or equal to or more than 0.045 mg/m³ yards, OR Persistent visible fugitive dust is leaving the site	The stop work Action Levels are as follows: - Asbestos 0.01 mg/m³ - PCBs 0.045 mg/m³ - Mercury 2.0 mg/m³ - Lead 3.0 mg/m³ - Oil Mist 0.045 mg/m³ Action Levels and suppression techniques shall be reviewed if analytical results exceed these levels.		
Sampling Period	30 minutes average	8 hours minimum		
Sampling Method	TSI DustTrak DR6000 Aerosol Monitor 8533	Integrating Asbestos Air Sampling in	Integrating Metals Air Sampling in	Integrating PCBs and Oil Mist Air



		Applicable NIOSH Methods	Applicable NIOSH and OSHA Methods	Sampling in Applicable NIOSH Method
Location	Downwind and downwind locations, in different than the fixed monitoring points	Downwind locations, determined based on wind direction		
Frequency	Continuously during all demolition and excavation activities	Asbestos, Lead, Mercury, Oil Mist and PCBs shall be sampled during the beginning of demolition activities and at the onset of each significantly different activity until three days' sample results are returned. Results for the same site location are below the Action Levels, sampling will be suspended.		
1 Safety factor of 10 Applied to OSHA Permissible Exposure Limits as Community Protection factor				



3.0 DEMOLITION AIR CONTAMINANTS OF INTEREST

Demolition and removal activities at the property located at 1301 State Street, San Diego, CA, may pose health hazards to people in the vicinity and at on-site locations due to the inhalation of airborne particulates. Contaminants of Interest (COI). The COIs specific to this site's demolition and excavation include asbestos, lead, mercury, oil mist, particulate matter (PM) and PCBs. These contaminants and their potential impacts are further discussed below.

3.1 ASBESTOS

Asbestos, due to its versatility, heat resistance, tensile strength, and insulating properties, has been used in most construction and building materials, including adhesives, insulation, tar paper, and tiles. The United States Environmental Protection Agency (EPA) defines asbestos-containing materials (ACM) as building materials containing greater than 1% asbestos, and Cal/OSHA defines asbestos-containing construction materials (ACCM) as construction materials containing greater than 0.1% asbestos.

Cal/OSHA regulates occupational exposure to asbestos and has established regulations for the control of asbestos hazards. Furthermore, Cal/OSHA established a Permissible Exposure Limit (PEL) of 0.1 fiber per cubic centimeter of air averaged over 8-hours' time weighted average (TWA) exposures. To apply this exposure limit for community protection, a safety factor of 10 is applied to lower it to 0.01.

3.2 LEAD AND MERCURY

Lead and mercury toxicity are varied and include cancers, gastrointestinal disease, blood-forming organs toxicity, reproductive system developmental toxicity, skeletal system toxicity and osteoporosis, nervous system toxicity, cardiovascular system toxicity, dermal toxicity, renal and liver damage, and other diseases.

Cal/OSHA regulates heavy metals including arsenic (inorganic), cadmium, chromium, mercury, and lead and has established regulations controlling occupational exposures to these metals. Furthermore, Cal/OSHA established PELs for these metals for workers' protection purposes. To apply these exposure limits for community protection, a safety factor of 10 is applied to lower it.

Lead and mercury in the particulate form enter the body primarily by inhalation and to a lesser degree by ingestion. Airborne lead and mercury concentrations are dependent on



The concentrations of these metals in the building materials that will be damaged during building demolition, the concentration of airborne dust carrying these metals into the air and wind speed.

The CalOSHA permissible exposure limits (PELs) for inorganic metallic and particulate lead are the Action Level of $30 \text{ } \mu\text{g}/\text{m}^3$ and PEL of $100 \text{ } \mu\text{g}/\text{m}^3$, and the PEL for inorganic metallic vapor and particulate mercury is $2 \text{ } \mu\text{g}/\text{m}^3$.

3.3 PARTICULATE MATTER

Airborne particulate matter and dust levels depend on the degree of moisture in the dust source, the level of released dust into the air and wind speed. It includes particulate matter (PM) of aerodynamic diameter sizes of $1\text{--}10$ microns as PM_{10} , $\text{PM}_{2.5}$ and PM_{10} , total and respirable airborne nuisance PM.

The primary route of particulate matter entry into the body is inhalation. PM particles of an aerodynamic diameter larger than 10 micrometers can deposit in the nasal passages and throat, whereas PM particles of an aerodynamic diameter equal to or less than 10 micrometers can deposit in the lungs and alveoli.

Airborne particulate matter concentrations are dependent on the concentrations of contaminants in the soil, the degree of moisture in the soil, and wind speed, and exposures can occur during demolition work and the excavation or moving of debris and soil.

3.4 POLYCHLORINATED BIPHENYL

Polychlorinated biphenyls (PCBs) are a group of manufactured synthetic organic chemicals used in numerous industrial and commercial applications. PCBs chemicals were manufactured in the United States from 1929 until they were phased out in 1977 and ultimately banned in 1979 due to the chemical's detrimental impacts on human and environmental health. PCBs were used in various commercial and industrial applications, including hydraulic equipment, electrical, elastomers in paints, additives to paints and floor finishes, plastics and rubber products, due to their chemical stability, resistance to extreme temperatures, high boiling point and electrical insulating properties. PCBs use has also been identified in capacitors, transformers, lubricants oils for hydraulic systems and motors, solvents for paints and caulking, consumer products such as carbonless copy paper, and internal components for fluorescent lights ballast.



PCBs compounds known as congeners routes of entry into the body include inhalation of airborne PCBs congeners vapors, ingestion food and drinking water containing PCBs congeners, skin absorption of PCBs congeners from contaminated building materials and soil and/or eye contact with airborne PCBs vapors. The CalOSHA PEL is listed as 0.1 mg/m^3 for 100% chlorine content Aroclor 1248 and 1.0 mg/m^3 for 20% chlorine content Aroclor 1254 as indicated by 8 CCR 10100.

3.5 HYDRAULIC OIL

Hydraulic oil present in the building, a mineral oil, is anticipated to be released as airborne oil mist during the demolition of the building and deposit onto the soil surrounding the building. Mineral oil can enter the body by inhalation and ingestion. The CalOSHA PEL for oil mist is 10 mg/m^3 .



4.0 IDENTIFICATION OF CONTAMINATED SOIL

Areas of confirmed contaminated soil have not been identified on the Subject Property at this time. The responsibility of recognizing potential contamination areas that may arise during demolition and excavation lies with the Owner's Representative. Signs of soil contamination in the field can include, but are not limited to, unusual soil discoloration (such as grey, greenish, black, or other abnormal colors), the presence of buried debris (like metal, asphalt, tires, concrete, or burned materials), or the detection of unusual odors (like "diesel", "oil", or "solvent" smells). Fuel spills like gasoline, diesel, and motor oil can leave evidence of contamination in the field. It is important to note that elevated concentrations of metals, chlorinated solvents, pesticides, and other contaminants might not show visible signs of contamination.

If there is evidence of soil contamination encountered during demolition and excavation work, operations in that specific area of the Property should halt, and the Owner's Representative should be notified. Soil displaying signs of contamination in the field should undergo sampling, under the direct oversight of a Professional Geologist (PG) or Professional Engineer (PE).

4.1 CONTAMINATED SOIL HANDLING

Contractors responsible for demolition and excavation activities involving soil potentially contaminated shall hold all the necessary permits. During any activities that disturb or handle contaminated or potentially contaminated materials, environmental field personnel will continuously monitor air quality. Onsite contractors engaged in earth-disturbing tasks or involved in managing impacted or potentially impacted soil, as well as environmental field personnel, must receive proper training, adhering to federal, OSHA, CalOSHA, DOSH, CDPH requirements as relevant to their job responsibilities. If deemed necessary, required personal protective equipment will be immediately accessible. The removal, handling, transportation, and disposal of contaminated soil excavated during the project will comply with applicable federal, state, and local laws and regulations.

4.2 SOIL STAGING

Contaminated soil, if stored at the project site, must be placed on a high-density polyethylene or an equivalent impermeable barrier and covered with high-density polyethylene or an equivalent impermeable barrier, or it should be put in United States Department of Transportation (DOT) approved containers. The polyethylene sheeting should have dimensions larger than those of the stockpile. Containers will be securely covered and stored to prevent the escape of contaminant vapors, odors, erosion of the soil, and



rainwater infiltration impacted and potentially impacted soil must be stored separately from clean soil to prevent contamination.

The stockpile shall not be located in sensitive site areas or near storm drain inlets and waterways. Stockpile areas should remain free of standing water at all time. Any excess water from excavated soil that is too wet for transport will be properly collected, containerized, analyzed and disposed of.

4.3 WASTE CHARACTERIZATION AND PROFILING

Soil intended for on-site disposal will undergo waste characterization through sampling at a frequency suitable for the contaminants of concern. This process will follow the waste profiling guidelines of the chosen disposal facilities and generally align with the requirements outlined in 40 CFR Part 261. Specifically, only discrete soil samples will be collected for this purpose.

4.4 DUST MITIGATION

To minimize dust generation, demolition and excavation areas will be controlled with soil wetting and physical barriers (e.g., polyethylene sheeting), as needed. Wetted surfaces will be visually wet, and care shall be taken during wetting to avoid generation of runoff.

Stray waste material and impacted soil on vehicles and tires will be removed manually with a brush at each excavation and soil staging area over plastic sheeting, as deemed necessary. Construction entrance gates or squeegee gates will be used to help remove soil from tire treads of trucks leaving the Subject Property, as necessary.

4.5 TRANSPORTATION REQUIREMENTS AND PROCEDURES

4.5.1 REQUIREMENTS FOR HAULERS

Only qualified haulers will be retained to transport contaminated soil from the project site. The selected haulers will be fully licensed and insured to transport the soils. Haulers will follow all applicable requirements in CCR, Title 19, Parts 170 through 177 with regard to loading, unloading, and general handling, based on transport mode.



4.5.2 Truck Loading Operations

As necessary, contaminated soils will be loaded onto trucks at predetermined staging areas, to be transported to a specified disposal site. Any residual waste material found on the vehicles, such as on the tires or container edges, will be manually cleaned using a brush. To prevent the escape of soil or dust, the truck's container will be securely covered during transit. Before departing from the soil staging areas, environmental field staff or the site supervisor will conduct a thorough inspection of each truck. This inspection will ensure that the soil container is properly covered and secured, the truck is cleared of any excess soil, and all necessary documentation, including manifests signed by the Owner or authorized individual, is in order. The trucks will also be equipped with appropriate placards and documentation provided by the Contractor. To reduce dust emissions during soil loading, water spray or a dust suppressant will be applied as needed.

4.5.3 TRANSPORTATION

The on-site transportation of non-hazardous and hazardous waste will comply with the DOT regulations as outlined in the Code of Federal Regulations (CFR), Title 49. It will also adhere to the stipulation of the California Hazardous Waste Control Law, found in the Health and Safety Code (HSC) and subsequent sections, as well as the California Code of Regulations (CCR), Title 22, Section 6628 and subsequent sections.

Aligned with these regulations, every waste hauler will satisfy and provide documentation of the following criteria:

- Vehicles will have passed a current annual inspection
- Vehicle operators will be trained in the safe handling of the waste material
- Haulers will document their ability to pay damages that may be caused by their operations through maintaining proper and current insurance coverage
- Haulers will have valid licenses issued by the California Highway Patrol (CHP) for transportation of hazardous materials
- Haulers will take certain actions to minimize waste discharges during transport e.g., covering the load to prevent the discharge of dust/particulates into the atmosphere during hauling

In accordance with the above-mentioned regulations, hazardous waste haulers will satisfy the following additional requirements:

- Haulers will have a valid DTSC registration
- Haulers will have an active EPA identification number
- Haulers will comply with the uniform Hazardous Waste Manifest System



4.5.4 TRAFFIC CONTROL PROCEDURES

Soil designated for disposal at off-site disposal facilities will be transported in trucks from the project site. To mitigate any impact on local streets, these trucks will be arranged in a controlled staging area before loading. Traffic coordination will be implemented to ensure that only a limited number of trucks are present at the project site at any given time. This approach aims to decrease the volume of truck traffic on nearby roads and minimize dust emissions from onsite movements. Additionally, while at the project site, all vehicles will be required to adhere to reduced speed limits for example, less than five miles per hour for safety reasons and to practically reduce dust generation.

4.5.5 WASTE MANIFEST

For monitoring the movement of waste soils from their origin to the disposal facility, either the standard non-hazardous waste manifest or the uniform hazardous waste Manifest will be utilized. Each manifest must be signed by the Owner or a designated representative before the excavated soil is transported off-site. To ensure proper tracking, copies of the waste manifest for each truckload will be kept in trucks during their transport to the disposal site and retained onsite until the project's completion.

The transportation of waste will adhere to various regulatory standards including the California Vehicle Code (CVC), CDP Regulations 13 CCR, California State Fire Marshal Regulations 19 CCR, DOT Regulations, Title 19 CFR, and the California CSC and 22 CCR. These guidelines mandate the maintenance of accurate records throughout the transportation process. A designated representative from the Contractor will be responsible for keeping a detailed log of all waste management and trucking activities while onsite. This log will include notes on observations, personnel present, and the times of trucks' arrival and departures.



5.0 DEMOLITION AND EXCAVATION AIR MONITORING

5.1 PARTICULATE MATTER AIR MONITORING

TSI DustTrak DRX Aerosol Monitor 8533 or equivalent shall be used to monitor particulate matter. This direct reading instrument has an aerosol measurement range from 0.001-100 mg/m³ to 1-100,000 µg/m³, and provides appropriate sensitivity for site applications.

These direct reading instruments will be calibrated on a daily basis and maintained in accordance with the manufacturer's specifications. All real-time monitoring data will be logged. Data records will be referenced to site location, time and date of reading, and the initials of the field technician. The air-monitoring information will be monitored throughout the day during site activities and reviewed into the documentation package to ensure the airborne levels at the site perimeter are less than the established site action levels.

The initial assessment of the site should include an assessment of the concentrations of air contaminants in a non-contaminated area, generally upwind to the site. This is referred to as background concentration and will be recorded and compared to measurements made during actual measurements in potentially contaminated areas and downwind. Any drastic departure from background levels should be addressed by the use of effective dust suppression practices.

Airborne particulates at the monitoring points will be measured on a throughout the day during work activities and reported as 30-minute averages. An alarm (e.g. audible alarm and an electronic notification to a computer or mobile phone) should provide notification that the downwind location is measuring concentrations equal to or greater than the particulate matter action level if the ambient air concentration at the downwind location is 10 µg/m³ greater than background (as measured at the upwind site) for a 30-minute period, or if airborne dust is observed leaving the work site during moving less than 10 cubic yards of soil, dust suppression activities will be employed. Work activities may continue during dust suppression activities provided that the downwind levels do not continually exceed 10 µg/m³ greater than background and persistent visible dust is not migrating from the work site. Site activities warrant monitoring overnight or on the weekends, the dust monitors will continue collecting measurements, with an alarm sent to site personnel if thresholds are exceeded.

If the ambient air concentration at the downwind location is 20 µg/m³ greater than background (as measured at the upwind site) for a 30-minute period, or if airborne dust is



observed leaving the work site during moving equal to or more than 10 cubic yards of soil, dust suppression activities will be employed. Work activities may continue during dust suppression activities provided that the downwind levels do not continually exceed 2 mg/m^3 greater than background and persistent visible dust is not migrating from the work site. Site activities warrant monitoring overnight or on the weekends, the dust monitors will continue collecting measurements, initiate an alarm sent to site personnel if thresholds are exceeded.

If, after implementation of dust suppression techniques, downwind levels are greater than 2 mg/m^3 or 10 mg/m^3 greater than the upwind level, work will cease and a re-evaluation of activities initiated. Work will resume once dust suppression measures and other controls are successful in reducing the downwind concentration to less than 2 mg/m^3 or the upwind level for 15 minutes and in preventing persistent visible dust from migrating beyond the work site.

Meteorological parameters consisting of wind speed, wind direction, temperature and relative humidity will be monitored continuously onsite and reported as 30-minute averages in the data set.

5.2 SPECIFIC AIR CONTAMINANTS MONITORING

A characterization of air quality with respect to site asbestos, heavy metals and PCBs can be verified through sequential integrating air sampling and laboratory analysis to determine that there are not exceedances of the AL included in Section 2.2 and this section.

5.2.1 SAMPLING LOCATION AND FREQUENCY

Sequential air contaminants monitoring provides verification samples that shall be collected to determine the concentration of asbestos, lead, mercury, oil mist and PCBs in the air at the beginning of each demolition phase or whenever there is a significantly new demolition activity that may increase concentrations of these air contaminants until three consecutive days of data is returned. These results will be compared to levels established in this APSMP for asbestos, lead, mercury, oil mist and PCBs. Constituent-sequential monitoring will be conducted downwind of the demolition activities.

Downwind directions will be re-established each day by reviewing the actual site-sequential meteorological data at a representative location on site. Air monitoring locations may be moved if a significant change in wind direction is observed, or due to the location, nature



and intensity of site activity, or results of the contractor's health and safety monitoring. Modifications of monitoring locations shall be documented.

Perimeter monitors will be placed as close to the property line as feasible, such that other sources of fugitive dust between the sampler and the property line are minimized.

Samples will be collected during the active working period on the site for each sampling day, generally during the hours of 7 AM to 4 PM. Air pumps will be installed and operated at continuous flow. The pumps will draw ambient air through a sample media at a constant flow rate. The devices, set approximately five feet above ground, will be deployed at the beginning of each day prior to any demolition activities taking place.

The sampling devices will be removed at the end of the workday, and the sample media will be sent on-site for laboratory analysis. Samples collected will be sent to the laboratory at the end of each day of monitoring whenever practicable.

Asbestos air sampling shall be performed by third party CalOSHA certified asbestos consultants (CACs) and/or certified site surveillance technicians (CSSTs) in compliance with CalOSHA requirements codified in 8 CCR 3110 and 1529.

5.2.2 AIR MONITORING ACTION LEVELS

Table 5-1 provides Action Levels for airborne asbestos, lead, mercury, oil mist and PCBs, Detection Limits, Sampling Methods, Sampling Media and Sampling Period.

Asbestos, lead, mercury, oil mist and PCBs air samples will be collected using battery operated SKC universal pumps or equivalent at the perimeter locations over time periods that average approximately eight (8) to ten (10) hours a day.

Meteorological data and real-time data collected will be evaluated and used to select what sample is anticipated to be the downwind sample for each day of monitoring if there is any uncertainty regarding the predominant wind direction.



TABLE 5-1 AIR MONITORING ACTION LEVELS					
Air Contaminant	Action Level	Detection Limit	Sampling Method	Sampling Media	Sampling Period
Asbestos	PCM Total fibers ≤ 0.01 /cc TEM Asbestos fibers ≤ 0.01 /cc	PCM ≤ 0.002 /cc TEM ≤ 0.002 /cc	NIOSH Methods 7007 & 7002	25 mm MCE filter	8 hours
Lead and Mercury	Mercury ≤ 2 ng/m ³ Lead ≤ 30 ng/m ³	ng ≤ 0.009 ng Pb ≤ 0.023 ng	Lead NIOSH Method 7303 Mercury NIOSH Method 6009	37 mm MCE filter 37 mm PVC filter	8 hours
PCBs	PCBs ≤ 10 ng/m ³	PCBs ≤ 6 ng/sample	NIOSH Method 6003	37 mm PTFE filter	8 hours
Oil Mist	Oil Mist ≤ 100 ng/m ³	Oil Mist $\leq$	NIOSH Method 6026	P or PTFE	8 hours
NIOSH and OSHA Methods are selected based on SGS Galson Laboratory recommendations NIOSH Method 7002 TEM analysis may be used to confirm asbestos fibers if NIOSH 7000 PCM analysis exceeded 0.01 /cc					

At the conclusion of each sampling day or event, the sample drums will be removed from their monitoring locations, sampling cassettes will be removed from the inlet tubing, individual cassettes will be labeled with the monitoring location identification number, date, and total monitoring time, and then be refrigerated or placed into an approved shipping container.

Coin-custody forms will be completed and signed with the samples to the analytical laboratory. When completing the coin-custody forms, the sampling technician will identify the specific analytes to be analyzed. Reporting of sampling events will include meteorological data, and the presence of potential sources or site COIs. Weather observations will be taken from the weather station onsite.



5.3 ESTABLISHMENT OF BACKGROUND CONCENTRATIONS

The initial assessment of the site should include an assessment of the concentrations of air contaminants in a non-contaminated area, generally upwind to the site. Asbestos, heavy metals, particulate matter and PCBs background air monitoring shall be used to establish background airborne concentrations. This is referred to as background concentration and will be recorded and compared to measurements made during actual measurements in potentially contaminated areas and downwind. Any drastic departure from background levels should be addressed by the use of effective dust suppression practices.



6.0 CORRECTIVE ACTIONS

Based upon perimeter particulate matter monitoring data described in the previous sections and/or visual observation, the need for dust suppression procedures will be determined by the Site Safety Officer.

The demolition activities will be conducted in a manner that reduces the potential to generate dust and particulates from being generated. Based on the guidance from these documents the following techniques may be employed to mitigate the generation and migration of fugitive dust during demolition activities.

1. Increase frequency, volume, and/or coverage of water misting, sprays, and foggers to prevent debris and dirt from drying.
2. Provide additional dust suppression systems and operating personnel during the task duration.
3. Routine checks to ensure that covered stockpiles remain covered.
4. Reduce the pace or cease, dust producing activity until the problem is corrected.
5. Notify the area supervisor of dust conditions and implement dust suppression procedures.
6. Remove accumulated dirt and soil from problematic areas, and/or cover, enclose, or isolate dust generating areas/surfaces to shield them from the wind.
7. Modify operating procedures and methods to eliminate problematic conditions.
8. Increase level of worker awareness and instruct them on implementation of any new or modified operating procedures.
9. Report and document all procedural modifications and results.
10. Perform routine audits of dust suppression methods and work areas for dust sources.

If, after implementation of dust suppression techniques, downwind particulate concentrations are more than 20 and 10 g/m^3 greater than the wind level or persistent visible fugitive dust is leaving the site, work will be suspended until appropriate corrective measures are identified and implemented to remedy the situation.

Dust suppression techniques consist of using "Dust Boss" demolition water misting fans



throughout the work site as the work-fronts change, as well as using surfactants when practicable. Placement of the misting fans will be determined daily, and will be driven by site conditions. Fans may be moved throughout the day as conditions change. Stockpile material from demolition will be treated with water, treated with surfactant, or tarped, depending on the duration that the stockpile will remain in place, in order to minimize dust migration. Intermodal containers will be tarped immediately after loading to eliminate migration of dust.



7.0 APPROVALS

The undersigned certify that this Air Pollution and Soil Management Plan will be utilized for evaluating airborne emissions from building demolition at 1301 State Street, San Diego, California 92101.

November 28, 2023

Robert Menald, CAC, LRC IA PM
Project Manager

Date



November 28, 2023

Ibrahim Sobel, MS, MSP, CI, CAC, LRC IA
Certified Industrial Hygienist

Date



REFERENCES

- California Title 8 California Code of Regulations (8 CCR), General Industry Safety Orders (GISO) and Construction Safety Orders (CSO)
 - Section 3111 – Certification of Asbestos Consultants and Site Surveillance Technicians
 - Section 1529 – Asbestos
 - Section 15321 – Lead
 - Section 1500 – Air Contaminants
- County of San Diego Department of Environmental Health, 2011, Site Assessment and Mitigation Manual, Section 4, Site Investigation Techniques August 1, 2011
- California Environmental Protection Agency (CalEPA), Air Resources Board (ARB), Title 17 California Code of Regulations, Article 2, Section 70200 (17 CCR 70200) Ambient Air Quality Standards (AAQS) for Particulate Matter (PM)
- United States Department of Labor (DOL), Occupational Safety and Health Administration (OSHA) 29 CFR 1010.1000 – Air Contaminants
- United States Department of Health and Human Services (HHS), Centers for Disease Control and Prevention (CDC), National Institute for Occupational Safety and Health (NIOSH)
 - Pocket Guide to Chemical Hazards
 - Method 7303 – Elements by Inductively Coupled Argon Plasma-Atomic Emission Spectroscopy (ICP-AES), March 1, 2003
 - Method 7000 – Asbestos and Other Fibers by Phase Contrast Microscopy, June 1, 2019 and
 - Method 7002 – Asbestos by Transmission Electron Microscopy (TEM), August 1, 1990

SECTION 31 10 00

SITE CLEARING

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. Removal of existing trees and vegetation
- B. Clearing vegetation, debris, trash and other materials within limits indicated
- C. Grubbing of vegetation within limits indicated
- D. Stripping of topsoil within limits indicated
- E. Removing above-grade site improvements within limits indicated
- F. Disconnecting, capping or sealing, and abandoning site utilities in place
- G. Disconnecting, capping or sealing, and removing site utilities
- H. Disposing of objectionable material

1.02 RELATED DOCUMENTS

- A. Geotechnical Report: "Geotechnical Investigation, Multi-Use Residential Development Project, 345 W. Ash St & 1350 Front St, San Diego, California 92101", dated December 22, 2022, by Leighton and Associates, Inc.
- B. Soil Mitigation Plan.
- C. ANSI A300: Industry Standards for Tree Care Practices
- D. Applicable Publications
 - 1. "Trees and Building Sites," official publication of the International Society of Arboriculture.

1.03 DEFINITIONS

- A. ANSI: American National Standards Institute
- B. CAL-OSHA: California Occupational Safety and Health Administration
- C. Topsoil: Natural or cultivated surface-soil layer containing organic matter and sand, silt, and clay particles; friable, pervious, and black or a darker shade of brown, gray, or red than underlying subsoil; reasonably free of subsoil, clay lumps, gravel, and other objects more than 2 inches in diameter; and free of weeds, roots, and other deleterious materials.

1.04 SUBMITTALS

- A. Photographs or videotape, sufficiently detailed, of existing conditions of trees and plantings, adjoining construction, and site improvements that might be misconstrued as damage caused by site clearing.

1.05 QUALITY ASSURANCE

- A. Do not remove or prune trees without first securing a permit from the appropriate agency.
- B. Prune to the standards of the International Society of Arborists and to ANSI A300.

1.06 PROJECT CONDITIONS

- A. Except for materials indicated to be stockpiled or to remain the Owner's property, cleared materials are the Contractor's property. Remove cleared materials from site and dispose of in lawful manner.
- B. Salvageable Improvements: Carefully remove items indicated to be salvaged and store where indicated on plans or where designated by the Owner's Representative. Avoid damaging materials designated for salvage.
- C. Unidentified Materials;
 - 1. If unidentified materials are discovered, including hazardous materials that will require additional removal other than is required by the Contract Documents, immediately report the discovery to the Owner's Representative.
 - 2. If necessary, the Owner's Representative will arrange for any testing or analysis of the discovered materials and will provide instructions regarding the removal and disposal of the unidentified materials.

PART 2 - PRODUCTS

2.01 SOIL MATERIALS

- A. Backfill excavations resulting from demolition operations with on-site or import materials conforming to engineered fill defined in Section 31 20 00, Earth Moving.

PART 3 - EXECUTION

3.01 PREPARATION

- A. Protect and maintain benchmarks and survey control points during construction.
- B. Locate and clearly flag trees and vegetation to remain or to be relocated, as well as trees and vegetation to be removed.
- C. Protect existing site improvements to remain during construction.

3.02 TREE REMOVAL

- A. Remove trees designated for removal prior to the construction of new improvements in the vicinity:
 - 1. When demolishing trees indicated to be removed within areas for new pavement or hardscape, remove tree, stump to a depth of two (2) feet below finish grade, and all roots located in the top twelve (12) inches of soil. Remove wood chips created from grinding process down to remaining stump then refill void and re-compact to 80% relative compaction. Use import soil as indicated in specifications for this purpose.
 - 2. When demolishing trees indicated to be removed within new landscaped areas, removal shall be done in one of the following ways:

- a. For trees located in accessible areas, remove tree and grind stump to four (4) inches below finish grade. Backfill the void and re-compact to 80% relative compaction. Use import soil as indicated in specifications for this purpose. Do not remove existing roots.
 - b. For trees located in inaccessible areas, cut stump flush with finish grade, and cover with 3 inches of bark mulch. Do not grind the stump and do not remove existing roots.
- B. Perform tree removal work in a safe and proper manner, adhering to CAL-OSHA tree work protection standards and ANSI A300 Standards.
- C. All trees to be demolished shall be removed in such a way as to not damage branches, trunks, or root systems of adjacent trees.

3.03 TREE PROTECTION

- A. Protect all trees that are not identified on plans for removal.
 - 1. For trees flagged for protection, establish a protection zone with stakes and caution tape with sufficient perimeter to protect mature root system and tree canopy.
 - a. No vehicles and no grading activities shall occur within the tree protection zone.

3.04 RESTORATION

- A. Restore damaged improvements to their original condition, as acceptable to the Owner's Representative.
- B. Repair or replace trees and vegetation indicated to remain that are damaged by construction operations, as directed by the Owner's Representative.
 - 1. Employ a qualified arborist, licensed in jurisdiction where the Project is located, to submit details of proposed repairs and to repair damage to trees and shrubs.
 - 2. Replace trees that cannot be repaired and restored to full-growth status, as determined by the Owner's Representative.

3.05 UTILITIES

- A. Locate, identify, disconnect, and seal or cap off utilities indicated to be removed or abandoned.
- B. Arrange to shut off indicated utilities with utility companies or verify that utilities have been shut off.
- C. Existing Utilities: Do not interrupt utilities serving facilities occupied by Owner's Representative or others unless authorized in writing by the Owner's representative, and then only after arranging to provide temporary utility services according to requirements indicated.
- D. Coordinate utility interruptions with utility company affected.
- E. Do not proceed with utility interruptions without the permission of the Owner's Representative and utility company affected. Notify Owner's Representative and utility company affected two working days prior to utility interruptions.
- F. Excavate and remove underground utilities that are indicated to be removed.
- G. Securely close ends of abandoned piping with tight fitting plug or cement slurry minimum 6 inches thick.

3.06 CLEARING AND GRUBBING

- A. Areas to be graded shall be cleared of existing vegetation, rubbish, existing structures, and debris.
- B. Remove obstructions, shrubs, grass, and other vegetation to permit installation of new construction. Removal includes digging out stumps and obstructions and grubbing roots.
- C. Do not remove trees, shrubs, and other vegetation indicated to remain or to be relocated.
- D. Prior to trenching or grading within the protection zones of the trees, carefully excavate, expose, and mark roots $\geq$ 2-inches diameter and preserve if possible or cut cleanly with a sharp saw under Arborist supervision. If roots $\geq$ 2-inches in limbs larger than 3-inches in diameter are cut or damaged during construction, contact Consulting Arborist for inspection and recommendations for remedial treatments.

3.07 SITE STRIPPING

- A. Strippings and spoils shall be disposed at an off-site location, per geotechnical recommendations.
- B. Remove vegetation before stripping soil.
- C. Surface soils that contain organic matter should be stripped. In general, the depth of required stripping will be relatively shallow (i.e. less than 2 inches); deeper stripping and grubbing may be required to remove isolated concentrations of organic matter or roots.
- D. Remove trash, debris, weeds, roots, and other waste materials.
- E. Stockpile soil materials designated to remain on site at a location approved by the General Contractors at a location away from edge of excavations without intermixing with subsoil. Grade and shape stockpiles to drain surface water. Cover to prevent windblown dust.
- F. Do not stockpile soil within drip line of remaining trees.

3.08 SITE IMPROVEMENTS

- A. Remove existing above- and below-grade improvements as indicated and as necessary to facilitate new construction.

3.09 BACKFILL

- A. Place and compact material in excavations and depressions remaining after site clearing in accordance with Section 312000, Earth Moving.

3.10 DISPOSAL

- A. Remove surplus soil material, unsuitable soil, obstructions, demolished materials, and waste materials, including trash and debris, and legally dispose of them off the Owner's property.

END OF SECTION

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SECTION 31 20 00

EARTH MOVING

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. Excavation and/or embankment from existing ground to subgrade, including soil sterilant, for roadways, driveways, parking areas, building pads, walks, paths, or trails and any other site improvements called for on the Plans.

1.02 RELATED SECTIONS

- A. Section 31 10 00, Site Clearing

1.03 RELATED DOCUMENTS

- A. Geotechnical Report: "Geotechnical Investigation, Multi-Use Residential Development Project, 345 W. Ash St & 1350 Front St, San Diego, California 92101", dated December 22, 2022, by Leighton and Associates, Inc.
- B. Soil Mitigation Plan.
- C. ASTM
 - 1. D1557, Test Method for Laboratory Compaction Characteristics of Soil Using Modified Effort
 - 2. D1586, Method for Penetration Tests and Split-Barrel Sampling of Soils
 - 3. D2487, Classification of Soils for Engineering Purposes
 - 4. D3740, Practice for Evaluation of Agencies Engaged in Testing and/or Inspection of Soil and Rock as Used in Engineering Design and Construction.
 - 5. D4318. Test Method for Liquid Limit, Plastic Limit and Plasticity Index of Soils
 - 6. E329, Specification for Minimum Requirements for Agencies Engaged in the Testing and/or Inspection of Materials Used in Construction
 - 7. E548, Guide for General Criteria Used for Evaluating Laboratory Competence
- D. California Building Code, California Code of Regulations, Title 24, Part 2, Chapter 18, Soils and Foundations, and Chapter 33, Safeguards During Construction
- E. Caltrans Standard Specifications, 2018
 - 1. Section 17, General
 - 2. Section 19, Earthwork
- F. CAL/OSHA, Title 8.

1.04 DEFINITIONS

- A. Borrow: Approved soil material imported from off-site for use as Structural Fill or Backfill.
- B. Excavation: Removal of material encountered above subgrade elevations.
 - 1. Authorized Over-Excavation: Excavation below subgrade elevations or beyond indicated horizontal dimensions as shown on plans or authorized by the Geotechnical Engineer.
 - 2. Unauthorized Over-Excavation: Excavation below subgrade elevations or beyond indicated horizontal dimensions without authorization by the Geotechnical Engineer. Unauthorized excavation shall be without additional compensation.
- C. Geotechnical Testing Agency: An independent testing agency qualified according to ASTM E329 to conduct soil materials and rock definition testing, as documented according to ASTM D3740 and ASTM E548 provided by the Owner.
- D. Structural Backfill: Soil materials approved by the Geotechnical Engineer and used to fill excavations resulting from removal of existing below grade facilities, including trees.
- E. Structural Fill: Soil materials approved by the Geotechnical Engineer and used to raise existing grades.
- F. Rock: Rock material in beds, ledges, unstratified masses, and conglomerate deposits and boulders of rock material $\frac{3}{4}$ cubic yards or more in volume that when tested by an independent geotechnical testing agency, according to ASTM D1586, exceeds a standard penetration resistance of 100 blows/2 inches.
- G. Structures: Buildings, footings, foundations, retaining walls, slabs, tanks, curbs, mechanical and electrical appurtenances, or other man made stationary features constructed above or below grade.
- H. Subgrade: Surface or elevation remaining after completing excavation, or top surface of a fill or backfill immediately below subbase, base or topsoil materials.
- I. Topsoil: Natural or cultivated surface-soil layer containing organic matter and sand, silt, and clay particles; friable, pervious, and black or a darker shade of brown, gray, or red than underlying subsoil; reasonably free of subsoil, clay lumps, gravel, and other objects more than 2 inches in diameter; and free of weeds, roots, and other deleterious materials.
- J. Unsuitable Material: Any soil material that is not suitable for a specific use on the Project. The Geotechnical Engineer will determine if a soil material is unsuitable.
- K. Relative Compaction: In-place dry density of soil expressed as percentage of maximum dry density of same materials, as determined by laboratory test procedure ASTM D1557.
- L. Utilities: onsite underground pipes, conduits, ducts and cables.

1.05 SUBMITTALS

- A. Follow submittal procedure outlined in Submittal Procedures.
- B. Samples:

1. If required by the Geotechnical Engineer, provide 20 pound samples, sealed in airtight containers, tagged with source locations and suppliers of each proposed soil material from on-site or borrow sources, 72 hours prior to use. Do not import materials to the Project without written approval of the Geotechnical Engineer.
2. Provide materials from same source throughout work. Change of source requires approval of the Geotechnical Engineer.

1.06 QUALITY ASSURANCE

- A. Conform all work and materials to the recommendations or requirements of the Geotechnical Report and meet the approval of the Geotechnical Engineer.
- B. Conform all work in accordance with Caltrans Standard Specification Section 17, General and Section 19, Earthwork.
- C. Percentage of compaction specified shall be the minimum acceptable. The percentage represents the ratio of the dry density of the compacted material to the maximum dry density of the material as determined by the procedure set forth in ASTM D1557.
- D. Perform excavation, filling, compaction and related earthwork under the observation of the Geotechnical Engineer. Materials placed without approval of the Geotechnical Engineer will be presumed to be defective and, at the discretion of the Geotechnical Engineer, shall be removed and replaced at no cost to the Owner. Notify the Geotechnical Engineer at least 24 hours prior to commencement of earthwork and at least 48 hours prior to testing.
- E. The Geotechnical Engineer will perform observations and tests required to enable him to form an opinion of the acceptability of the Project earthwork. Correct earthwork that, in the opinion of the Geotechnical Engineer, does not meet the requirements of these Technical Specifications and the Geotechnical Report.
- F. Upon completion of the construction work, certify that all compacted fills and foundations are in place at the correct locations, and have been constructed in accordance with sound construction practice. In addition, certify that the materials used are of the types, quality and quantity required by these Technical Specifications and the Geotechnical Report. The Contractor shall be responsible for the stability of all fills and backfills constructed by his forces and shall replace portions that in the opinion of the Geotechnical Engineer have been displaced or are otherwise unsatisfactory due to the Contractor's operations.
- G. Finish subgrade tolerance at completion of grading:
 1. Building and paved areas: ± 0.05 feet
 2. Other areas: ± 0.10 feet

1.07 PROJECT CONDITIONS

- A. Promptly notify the Owner's Representative of surface or subsurface conditions differing from those disclosed in the Geotechnical Report. First notify the Owner's Representative verbally to permit verification and extent of condition and then in writing. No claim for conditions differing from those anticipated in the Contract Documents and disclosed in the Geotechnical Report will be allowed unless the Contractor has notified the Owner's Representative in writing of differing conditions prior to the Contractor starting work on affected items.

- B. Protect open excavations, trenches, and the like with fences, covers and railings to maintain safe pedestrian and vehicular traffic passage.
- C. Prevent erosion of freshly-graded areas during construction and until such time as permanent drainage and erosion control measures have been installed in accordance with the erosion and sediment control plans.
- D. Temporarily stock-pile fill material in an orderly and safe manner and in a location approved by the Owner's Representative.
- E. Environmental Requirements: When unfavorable weather conditions necessitate interrupting earthwork operation, areas shall be prepared by compaction of surface and grading to avoid collection of water. Provide adequate temporary drainage to prevent erosion. After interruption, compaction specified in last layer shall be re-established before resuming work.

PART 2 - PRODUCTS

2.01 SOIL MATERIALS

- A. General: On-site soils are considered suitable for use as fill provided the materials are placed in accordance with Geotechnical Recommendations. Highly expansive soils shall not be used as select structural fill, or used as backfill for trenches located within hardscape areas.
- B. Imported fill soils, if required, should be predominantly granular in nature, and should be free of organics, debris, or rocks over 3 inches in size, and shall be approved by the Geotechnical Engineer before importing to the site. Imported non-expansive soils shall have a Plasticity Index less than 15 as determined by ASTM D4318, an R-value of at least 20, and fines content between 15 and 65 percent. Import fill shall be considered non-hazardous per Department of Toxic Substances Control guidelines (DTSC, 2017) and non-corrosive per Caltrans Corrosion Guidelines (Caltrans, 2018).

PART 3 - EXECUTION

3.01 GENERAL

- A. Perform work in accordance with Caltrans Standard Specification Section 19, Earthwork, as modified by the Contract Documents.
- B. Placement and compaction of material by flooding, ponding, or jetting will not be permitted.
- C. The use of explosives will not be permitted.
- D. Grading and earthwork operations shall be observed and tested by a representative of the Geotechnical Engineer for conformance with the project plans/specifications and the geotechnical recommendations. This work includes site preparation, selection of satisfactory materials, and placement and compaction of the subgrades and fills. Sufficient notification prior to commencement of earthwork is essential to make certain that the work will be properly observed.

3.02 CONTROL OF WATER AND DEWATERING

- A. Comply with project SWPPP, if dewatering is necessary.

- B. Prevent surface water and ground water from entering excavations, from ponding on prepared subgrades, and from flooding the site and surrounding area. Provide dewatering equipment necessary to drain and keep excavations and site free from water.
- C. Dewater during backfilling operation so that groundwater is maintained a least 1 foot below level of compaction effort.
- D. Obtain the Geotechnical Engineer's approval for proposed control of water and dewatering methods.
- E. Protect subgrades from softening, undermining, washout and damage by rain or water accumulation.
- F. Reroute surface water runoff away from excavated areas. Do not allow water to accumulate in excavations.
- G. Maintain dewatering system in place until dewatering is no longer required.

3.03 WET WEATHER CONDITIONS

- A. Do not prepare subgrade, place or compact soil materials if subgrade or materials are above optimum moisture content.
- B. If the Geotechnical Engineer allows work to continue during wet weather conditions, conform to supplemental recommendations provided by the Geotechnical Engineer.

3.04 BRACING AND SHORING

- A. Refer to Shoring Plans by Earth Support Systems for shoring specifications.
- B. Conform to California and Federal OSHA requirements.
- C. Place and maintain such bracing and shoring as may be required to support the sides of the excavations for the proper protection of workmen; to facilitate the work; to prevent damage to the facility being constructed; and to prevent damage to adjacent structures or facilities. Remove all bracing and shoring upon completion of the work.
- D. Be solely responsible for all bracing and shoring and, if requested by the Owner's Representative, submit details and calculations to the Owner's Representative. The Owner's Representative may forward the submittal to the Geotechnical Engineer, the Consulting Engineer and/or the California Division of Industrial Safety for their review. The Contractor's submittal shall include the basic design, assumed soils conditions and estimation of forces to be resisted, together with plans and specifications of the materials and methods to be used, and shall be prepared by a civil engineer or structural engineer registered in California. No excavations related to the proposed facility shall precede a response to the submittal by the Owner's Representative.
- E. Be solely responsible for installing and extracting the sheathing in a manner which will not disturb the position or operation of the facility being constructed or adjacent utilities and facilities.

3.05 TOPSOIL STRIPPING

- A. Remove topsoil in accordance with Section 31 10 00 and Geotechnical Report.

3.06 EXCAVATION

- A. Excavate earth and rock to lines and grades shown on plans and to the neat dimensions indicated on the plans, required herein or as required to satisfactorily compact backfill.
- B. Remove and dispose of large rocks, pieces of concrete and other obstructions encountered during excavation.
- C. Excavation through buried concrete and other unknown obstructions will require specialized techniques for demolition and removal.
- D. Where forming is required, excavate only as much material as necessary to permit placing and removing forms.
- E. Provide supports, shoring and sheet piles required to support the sides of excavations or for protection of adjacent existing improvements.

3.07 GRADING

- A. Uniformly grade the Project to the elevations shown on plans
- B. Round tops and bottoms of slopes as indicated or to blend with existing contours.

3.08 SUBGRADE PREPARATION

- A. Subgrade Preparation: Prior to backfilling depressions created by the removal of old foundations and utility lines, scarify the bottom of the excavation to a minimum depth of 12 inches, moisture conditioned and compacted to at least 90 percent of the maximum dry density.
- B. Over-excavate any remaining soft (pumping) areas down to firm soil and backfill the area.
- C. Subgrade shall be maintained in a moist, but not wet, condition by periodically sprinkling water prior to the placement of additional fill or installation of roads. Subgrade that has been permitted to dry out and loosen or develop desiccation cracking should be scarified, moisture conditioned, and re-compacted as recommended above.
- D. Prepare subgrades under the structural section of paved areas, curbs, gutters, walks, structures, other surface facilities and areas to receive structural fill.
- E. Obtain the Geotechnical Engineer's approval of subgrades prior to placing pavement structural section.

3.09 FILL PLACEMENT AND COMPACTION

- A. Place fill in uniformly moisture conditioned and compacted lifts not exceeding 6 inches in loose thickness. Each lift should be thoroughly moisture conditioned and compacted to 90 percent before successive fill layers are placed.
- B. In order to achieve satisfactory compaction in the subgrade and fill soils, it may be necessary to adjust the soil moisture content at the time of soil compaction per geotechnical recommendations. This may require that water be added and thoroughly mixed into any soils which are too dry or that scarification and aeration be performed in any soils which are too wet.

- C. Obtain the Geotechnical Engineer's approval of surface to receive structural fill prior to placement of structural fill material.
- D. Place structural fill on prepared subgrade.
- E. Do not drop fill on structures. Do not backfill around, against or upon concrete or masonry structures until structure has attained sufficient strength to withstand loads imposed and the horizontal structural system had been installed.
- F. Do not compact by ponding, flooding or jetting.
- G. Perform compaction using rollers, pneumatic or vibratory compactors or other equipment and mechanical methods approved by the Geotechnical Engineer.
- H. Compaction requirements (unless specified otherwise by the Geotechnical Engineer):
 - 1. Compact structural fills less than 5 feet thick to 90 percent compaction.
 - 2. Compact structural fill 5 feet thick or greater to 95 percent compaction.
 - 3. Compact the upper 6 inches of subgrade soils beneath pavements, curbs and gutters to 95 percent compaction. Extend compaction 5 feet beyond pavement edges unless specified otherwise by the Geotechnical Engineer.
 - 4. Compact the upper 6 inches of subgrade soils under walks, structures and areas to receive structural fill to 90 percent compaction.

3.10 DISPOSAL

- A. Lawfully dispose of all unsuitable and excess or surplus material off-site. Disposal shall be at no cost to the Owner unless it is hazardous material.

END OF SECTION