

**PROJECT MANUAL
FOR
STUDEBAKER ES – FLOORING &
INTERIOR PAINTING**

LOCATED AT
Studebaker ES - 11800 Halcourt Ave., Norwalk, CA 90650



**OWNER
LITTLE LAKE CITY SCHOOL DISTRICT
10515 S. PIONEER BLVD., SANTE FE SPRINGS, CA 90670**

**CONSTRUCTION MANAGER
LEDESMA & MEYER CONSTRUCTION CO., INC.
9441 HAVEN AVENUE
RANCHO CUCAMONGA, CA 91730**

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NOTICE INVITING BIDS

NOTICE IS HEREBY GIVEN that the **LITTLE LAKE CITY SCHOOL DISTRICT** of **LOS ANGELES** County, California, acting by and through its Governing Board, hereinafter referred to as the District, will receive up to, but not later than **2:00 PM** on **MARCH 28, 2024**, sealed bids for the award of a contract for the construction of:

District Bid No. 23-24-001
STUDEBAKER ES – FLOORING & INTERIOR PAINTING
Located at **11800 HALCOURT AVENUE, NORWALK, CA 90650**

At **2:00 PM** on **MARCH 28, 2024**, all sealed bids will be publicly opened and read aloud. Bid Package categories (*and the California Contractor License classification/s which is / are hereby deemed acceptable for submitting a singular category type prime bid*) are as follows:

CATEGORY NUMBER 4 - (CA License Classification B) Prequalification Required
INTERIOR ABATEMENT/INTERIOR FLOORING AND PAINT

Inclusive of all specifications and plans

All bids shall be made on a bid form furnished by the District.

Bids will be received at the **DISTRICT PURCHASING OFFICE, 10515 S. PIONEER BLVD., SANTE FE SPRINGS, CA 90670**on, or before the time and date stated above. At **2:00 PM** on **MARCH 28, 2024**, all sealed bids will be publicly opened and read aloud at the aforementioned address.

Prospective contract bidders may secure documents in electronic format online only through “Bid Mail” using the following link or by contacting the District's Construction Manager:

<https://share.bidmail.com/quickplans/quickplans.aspx?cmd=LTAwMTM3ODQzODA5MC4wNTI4MjEOLTAzNjkyMy0wNzg2OS0wMDEyMTE2NDA3LTUyMTk1LjQ4NTM5MTE0>

LEDESMA & MEYER CONSTRUCTION COMPANY INC
9441 HAVEN AVENUE
RANCHO CUCAMONGA, CA 91730

Maria Bautista, Sr. Project Coordinator
Phone number: 909-476-0590 Email: mariab@lmcci.com

Each bid must conform and be responsive to all pertinent Bidding and Contract Documents. Copies are on file and open for public inspection at the District Office.

For information regarding this project, prospective bidders are requested to contact **LEDESMA & MEYER CONSTRUCTION COMPANY INC, 9441 HAVEN AVENUE, RANCHO CUCAMONGA, CALIFORNIA, 91730-5844, (phone number (909) 476-0590, fax number (909) 476-0592).**

Attention is directed to the requirements of the Information for Bidders regarding goals for Disabled Veteran Business Enterprise (DVBE) participation on this project. This project has a goal of 3% DVBE participation.

Each bid must be on the District's bid form and shall be accompanied by the Bid Bond Security, Bidder Questionnaire, DIR Registration Verification, Acknowledgement of Bidding Practices Regarding Indemnity, list of Designated Subcontractors, Non Collusion Declaration DVBE Participation Statement.

PRE-QUALIFICATION REQUIREMENTS: Pursuant to California Public Contract Code Section 20111.6, the District is requiring that all **PRIME** contractors holding an A, general engineering, or B, general building license and all electrical, mechanical or plumbing **PRIME** contractors holding a C-4, C-7, C-10, C-16, C-20, C-34, C-36, C-38, C-42, C-43, or C-46 license bidding **must be pre-qualified by this District.** **ALL** electrical, mechanical or plumbing subcontractors holding C-4 C-7, C-10, C-16, C-20, C-34, C-36, C-38, C-42, C-43, or C-46 licenses, listed by **PRIME** bidders must be prequalified prior to being listed as a subcontractor by a **PRIME** bidder submitting a bid on the Project. All prequalification packages must be turned in ten (10) business days prior to bid date. All general contractors and subcontractors will now be required to pre-qualify through Quality Bidders for any public works contract entered into with the District. Quality Bidders is an online pre-qualification site utilized by the Little Lake City School District to create a pool of qualified contractors. The link for Quality Bidders is <https://www.qualitybidders.com/>.

Prime Contractors bidding this work shall require, pursuant to Public Contract Code section 4108, all subcontractors providing labor and materials in excess of \$100,000.00 to supply an original signature and fully executed 100% Faithful Performance and 100% Payment Bond. All prime contractors bidding on this work must specify this requirement for subcontractor bonds in their written or published request for subcontractor bids. Failure to comply with this requirement shall not preclude contractor from complying with the subcontractor bonding requirements.

Bonds are required for each specification section or combination of sections which exceed(s) the limit listed above.

The practice of issuing separate purchase orders and / or subcontracts for the purpose of circumventing the subcontractor bonding requirement shall not serve to exempt the Contractor from these requirements.

No payments, except for a reimbursement payment to the Prime Contractor for the cost of the Prime Contractor's own Faithful Performance and Payment Bonds, shall be made to the Prime Contractor until the Prime Contractor provides the aforementioned subcontractor bonds to the District through the Construction Manager.

IMPORTANT NOTICE: This project is subject to DIR Public Works Funding Legislation - SB 854. To bid on this Project, the Prime Bidder and all of Prime Bidder's Subcontractors are required to be registered online as a "public works contractor" with the California Department of Industrial Relations at www.dir.ca.gov/public-works/ppublicworks.html and each shall pay an annual non-refundable \$400.00 fee via credit card.

The schedule of per diem wages is based upon a working day of eight (8) hours. The Contractor and all Subcontractors under the Contractor shall pay all workers on all work performed pursuant to this Contract not less than the general prevailing rate of per diem wages and the general prevailing rate for holiday and overtime work as determined by the Director of the Department of Industrial Relations, State of California, for the type of work performed and the locality in which the work is to be performed within the boundaries of the District, pursuant to section 1770, *et seq.*, of the California Labor Code.

The District has obtained from the Director of the Department of Industrial Relations the general prevailing rate of per diem wages and the general prevailing rate for holiday and overtime work in the locality in which the work is to be performed for each craft, classification or type of work needed to execute the contract pursuant to section 1770, *et. seq.*, of the California Labor Code. Holiday rates shall be paid as specified in the collective bargaining agreement applicable to each particular craft,

classification or type of work employed on the project. General prevailing wage rate information is also available on the internet at <http://www.dir.ca.gov>.

In accordance with Section 1773.2 of the California Labor Code, the Contractor shall post a copy of the determination of the prevailing rate of wages at each job site.

A payment bond and performance bond will be required prior to the execution of the contract. The payment bond and performance bond shall be in the form and amount set forth in the Contract Documents.

In accordance with provisions of Public Contract Code Section 22300, substitution of eligible and equivalent securities for any monies withheld to ensure performance under this contract will be permitted at the request and expense of the contractor.

All bidders must be properly licensed at time of bid pursuant to Public Contract Code Section 3300 and Business and Professions Code Section 7028.15. Failure to satisfy this requirement shall disqualify bidder. The successful bidder must maintain the license throughout the duration of this contract.

The award shall be made to the lowest responsible and responsive bidder whose proposal complies with the specified requirements. The District reserves the right to reject any and all bids and to waive irregularities in any bid. No bidder may withdraw his bid for a period of **NINETY (90)** days after the date set for the opening thereof.

The District reserves the right to postpone the date and time for the opening of bids at any time prior to the date and time initially announced in this Invitation to Bid in accordance with applicable law. For further information consult the Information for Bidders and the Contract Documents.

PRE-BID CONFERENCE: A pre-bid conference will be held at the **STUDEBAKER ELEMENTARY SCHOOL, 11800 HALCOURT AVE., NORWALK, CA 90650, meet in front of the Administration Office** for attendance by any interested bidder with representatives of the District, the Architect, and the Construction Manager on **MARCH 13, 2024 at 2:00 PM.**

First publication: **THURSDAY, FEBRUARY 29, 2024**

Second publication: **THURSDAY, MARCH 7, 2024**

Bids Due and Opened: **THURSDAY, MARCH 28, 2024**

END OF SECTION

INSTRUCTIONS TO BIDDERS

1. **Preparation of Bid Form.** Proposals under these specifications shall be submitted on the blank forms furnished herewith at the time and place stated in the Notice Inviting Bids. All blanks in the bid form must be appropriately filled in, and all proposed prices must be stated clearly and legibly in both words and numerals. All bids must be signed by the bidder in permanent blue ink and submitted in sealed envelopes, bearing on the outside, the Trade Contractor Category of Work, the bidder's name, address, telephone number, and California Contractor's License number, and the name of the Project for which the bid is submitted. The District reserves the right to reject any bid if all of the above information is not furnished. It is each bidder's sole responsibility to ensure its bid is timely delivered and received at the location designated as specified above. Any bid received at the designated location after the scheduled closing time for receipt of bids shall be returned to the bidder unopened.

2. **Bid Security.** Each bid must be accompanied by one of the following forms of bidder's security: (1) cash; (2) a cashier's check made payable to the District; (3) a certified check made payable to the District; or (4) a bidder's bond executed by a California admitted surety as defined in Code of Civil Procedure Section 995.120, made payable to the District, in the form set forth in the Contract Documents. Such bidder's security must be in an amount not less than ten percent (10%) of the maximum amount of such bidder's bid as a guarantee that the bidder will enter into the Contract, if the same is awarded to such bidder, and will provide the required Performance and Payment Bonds, insurance certificates and any other required documents. In the event that a bidder is awarded the Contract and such bidder fails to enter into said Contract or provide the surety bond or bonds within five (5) calendar days after award of the Contract to bidder, said security will be forfeited.

3. **Signature.** The bid form, all bonds, all designations of subcontractors, the Trade Contractor's Certificate, the Agreement, and all Guarantees must be signed in permanent blue ink in the name of the bidder and must bear the signature in longhand of the person or persons duly authorized to sign the bid.

If bidder is a corporation, the legal name of the corporation shall be set forth above together with the signature of authorized officers or agents and the document shall bear the corporate seal; if bidder is partnership, the true name of the firm shall be set forth above together with the signature of the partner or partners authorized to sign contracts on behalf of the partnership; and if bidder is an individual, his signature shall be placed above.

If bidder is a partnership, the true name of the firm shall first be set forth, together with the names of all persons comprising the partnership or co-partnership. The bid must be signed by all partners comprising the partnership unless proof in the form of a certified copy of a statement of partnership acknowledging the signer to be a general partner is presented to the District, in which case the general partner may sign.

Bids submitted as joint ventures must so state and be signed by each joint venturer.

Bids submitted by individuals must be signed by the bidder unless an up to date power-of-attorney is on file in the District office, in which case, said person may sign for the individual.

The above rules also apply in the case of the use of a fictitious firm name. In addition, however, where a fictitious name is used, it must be so indicated in the signature.

4. **Modifications.** Changes in or additions to the bid form, recapitulations of the work bid upon, alternative proposals, or any other modification of the bid form which is not specifically called for in the

Contract Documents may result in the District's rejection of the bid as not being responsive to the Notice Inviting Bids. **No oral or telephonic modification of any bid submitted will be considered.**

5. Erasures, Inconsistent or Illegible Bids. The bid submitted must not contain any erasures, interlineations, or other corrections unless each such correction creates no inconsistency and is suitably authenticated by affixing in the margin immediately opposite the correction the signature or signatures of the person or persons signing the bid. In the event that the District determines that any bid is unintelligible, inconsistent, or ambiguous, the District may reject such bid as not being responsive to the Notice Inviting Bids.

6. Examination of Site and Contract Documents. Each bidder shall visit the site of the proposed Work and become fully acquainted with the conditions relating to the construction and labor so that the facilities, difficulties, and restrictions attending the execution of the work under the Contract are fully understood. Bidders shall thoroughly examine and be familiar with the Drawings, specifications, Addenda, Contract Documents and Trade Contractor Scope of Work. The failure or omission of any bidder to receive or examine any Contract Documents, form, instrument, addendum, or other document or to visit the site and become acquainted with conditions there existing shall not relieve any bidder from obligations with respect to the bid or to the Contract. The submission of a bid shall be taken as prima facie evidence of compliance with this Section. Bidders shall not, at any time after submission of the bid, dispute, complain, or assert that there were any misunderstandings with regard to the nature or amount of work to be done.

7. Understanding of Schedule and Milestones. Trade Contractor understands that it is one of multiple Trade Contractors that has been contracted to construct the Project. Trade Contractor must thoroughly study the proposed Outline Schedule, Phases, and Milestones and determine:

- a. Timing of Work that will be performed by the Trade Contractor compared to other Trade Contractors
- b. Duration of Work and whether the duration is reasonable based on the Trade Category of Work and that of the other Trade Contractors that will all be simultaneously working on the Project.
- c. The key Milestones and Phases for Trade Contractor's Work.
- d. The dates when Submittals and Shop Drawings are to be delivered and reviewed
- e. Dates anticipated for Punch Lists for the Project.

The Project Baseline Schedule for the Project shall be built by CM based on the Outline Schedule and each Trade Contractor's realistic input on the Outline Schedule. Trade Contractor's failure to participate in preparing the Trade Contractor Baseline Schedule and Project Baseline Schedule will be deemed to have failed to participate in critical coordination activities necessary to ensure the Project will be completed in the Contract Time. Trade Contractor is also notified of Trade Contractor's obligation to undertake Punch List Work at the end of the Project. Trade Contractor's Substantial Completion of Trade Contract Work does not result in release of Retention even if there are other Trade Contractors that must perform Work for several weeks or months after Trade Contractor's Work is Substantially Complete. Retention shall be released upon Completion of all Punch List Work for the Project.

8. Withdrawal of Bids. Any bid may be withdrawn by written request at any time prior to the scheduled closing time for receipt of bids. The bid security for bids withdrawn prior to the scheduled closing time for receipt of bids, in accordance with this paragraph, shall be returned upon demand therefor.

As per Public Contract Code sections 5100 – 5110; a bidder must provide the District written notice within 5 working days, excluding Saturdays, Sundays, and State Holidays if they wish the District to consider allowing them to withdraw their bid due to a qualifying mistake as noted in the code.

No bidder may withdraw any bid for a period of ninety (90) calendar days after the date set for the opening of bids.

9. Agreements and Bonds. The Agreement form which the successful bidder, as Trade Contractor, will be required to execute, and the forms and amounts of surety bonds which will be required to be furnished at the time of execution of the Agreement, are included in the bid documents and should be carefully examined by the bidder. The number of executed copies of the Agreement, the Performance Bond, and the Payment Bond required is three (3). Payment and Performance bonds must be executed by an admitted surety insurer as defined in Code of Civil Procedure 995.120.

10. Interpretation of Plans and Documents/Pre-Bid Clarification. If any prospective bidder is in doubt as to the true meaning of any part of the Contract Documents, or finds discrepancies in, or omissions, a written request for an interpretation or correction thereof may be submitted to the District. The bidder submitting the request shall be responsible for its prompt delivery. **Any interpretation or correction of the Contract Documents will only be made by Addendum duly issued, and a copy of such Addendum will be made available for each Trade Contractor receiving a set of the Contract Documents.** No person is authorized to make any oral interpretation of any provision in the Contract Documents, nor shall any oral interpretation be binding on the District. Trade Contractor shall not utilize inclusion or duplication of Trade Contractor's Work in another Trade Contractor's scope of Work to determine items that may not be included or excluded in Trade Contractor's Work. The only method to determine whether Work of another Trade Contractor results in exclusion or inclusion of Work is through a Request for Information that is included in an Addendum. If discrepancies on Drawings, specifications or elsewhere in the Contract Documents are not covered by addenda, bidder shall include in their bid methods of construction and materials for the higher quality and complete assembly. Each request for clarification shall be submitted in writing, via email, to only the following persons:

Ledesma & Meyer Construction Co. Inc.

TO: Maria Bautista – Sr. Project Coordinator mariab@lmcci.com

CC: Jaime Velasquez – Superintendent jaimev@lmcci.com

Each transmitted request shall contain the name of the person and/or firm filing the request, address, telephone, and fax number, Specifications and/or Drawing number. Bidder is responsible for the legibility of hand written requests. Pre-bid clarification request shall be filed a minimum of **six (6)** days prior to bid opening. Requests received less than **six (6)** days before bid opening shall not be considered or responded to. A written response to timely pre-bid clarifications requests which materially affects the bidders price will be made by Addendum issued by the Mountain View School District not less than seventy-two (72) hours prior to bid opening.

11. Bidders Interested in More Than One Bid. No person, firm, or corporation shall be allowed to make, or file, or be interested in more than one prime bid for the same work unless alternate bids are specifically called for. A person, firm, or corporation that has submitted a proposal to a bidder, or that has quoted prices of materials to a bidder, is not thereby disqualified from submitting a proposal or quoting prices to other bidders or making a prime proposal.

12. Award of Contract. The Contract will be awarded to the lowest responsive responsible bidder by action of the governing Board. The District reserves the right to reject any or all bids, including without limitation the right to reject any non-conforming, non-responsive, unbalanced, or conditional bids. The District also reserves the right to waive any irregularities or informalities in any bids or in the bidding. In the event an award is made to bidder, and such bidder fails or refuses to execute the Contract and

provide the required documents within five (5) calendar days after award of the Contract to bidder, the District may award the Contract to the next lowest responsible and responsive bidder or release all bidders. **Each bid must conform and be responsive to the Contract Documents as defined in the General Conditions.**

13. Bid Protest Procedure. The lack of prompt procedures to resolve disputes regarding the bidding process would impair the District's ability to carry out its purpose of constructing this Project in a timely manner. Therefore, to the maximum extent authorized by law and notwithstanding any other procedures specified in documents referenced herein, all disputes and/or protests regarding the bidding process shall be subject to the following procedure. In submitting a bid to the District for this project, the bidder agrees to comply with and to be bound by this procedure. Only bidders who have submitted a bid proposal for this Project may file a bid protest. The protest shall be filed in writing with the Project Manager for the CM (Ledesma & Meyer Construction Co., Inc.) by or before 5:00 p.m., on the third (3rd) business day following the date of the bid opening.

Bid protests must be submitted via email to: Brent Griffen at bgriffen@llcsd.net. Written protests must be in the physical possession of Brent Griffen by or before the deadline for submitting protests. Any protest received after the deadline will be deemed untimely and will not be considered.

By filing the protest, protesting bidder consents to receipt of e-mail notices for purposes of the Protest and Protest-related questions, if applicable.

a. Required Contents of Bid Protest:

- 1) Name, address, fax and telephone number of the protester and the name, address and telephone number of the person representing the protesting party.
- 2) Solicitation of Contract Number.
- 3) Detailed statement of the legal and factual grounds for the protest, including a description of resulting prejudice to the protester.
- 4) Reference to the specific portion(s) of the Contract Documents which forms the basis of the protest.
- 5) Copies of relevant documents.
- 6) Request for a ruling by the District.
- 7) Statement as to the form of relief requested.
- 8) All information establishing that protester is an interested party for the purpose of filing a protest.
- 9) All information establishing the timeliness of the protest.

b. Protesting Party. The party filing the protest must have actually submitted a Bid for the Work. A subcontractor of a party submitting a Bid for the Work may not submit a Bid protest. A party may not rely on the Bid protest submitted by another Bidder but must timely pursue its own protest.

c. Proof of Service. The party filing the protest must concurrently transmit a copy of the initial protest document and any attached documentation to all other parties with a direct financial interest which may be adversely affected by the outcome of the protest. Such parties shall include all other Bidders who appear to have a reasonable prospect of receiving an award depending upon the outcome of the protest. The Bid protest must be accompanied by a proof of service declaring under penalty of perjury

that a copy of the written protest was concurrently delivered to all such affected parties, including any Bidder(s) against whom the protest is made.

d. Response Submitted by Protested Bidder. The protested Bidder will have until 5:00PM on the third (3rd) business day after the deadline for submitting initial protests to submit a written response. The responding Bidder shall transmit the response to the protesting Bidder concurrent with delivery to the District in the manner prescribed for submitting initial protests, above.

e. Frivolous Protests. If the District determines that a protest is frivolous, the protesting Bidder may be determined to be non-responsible and that Bidder may be determined to be ineligible for future contract awards

f. Resolution of Bid Controversy: District shall make its best effort to resolve protests and issue a written decision within fifteen (15) calendar days of receipt of the protest, unless factors beyond the District's reasonable control prevent such resolution. The decision on the bid protest will be copied to all parties involved in the protest.

g. Reservation of Rights to Proceed with Project Pending Protest. The District reserves the right to proceed to award the Trade Category of Work for the Project and commence construction pending a protest. If there is State Funding or a critical completion deadline, the District may choose to shorten the time limits set forth in this Section due to the urgency of proceeding with Work if written notice is provided to the protesting party. E-mailed notice with a written confirmation sent by First Class Mail shall be sufficient to constitute written notice. If there is no written response to a written notice shortening time, the District may proceed with the award.

h. Finality. The procedure and time limits set forth in this paragraph are mandatory and are the Bidder's sole and exclusive remedy in the event of Bid protest. Failure to comply with this Bid Protest Procedure shall constitute a waiver of the right to protest and shall constitute a failure to exhaust the protesting bidder's administrative remedies.

14. Alternates. If alternate bids are called for, the Contract may be awarded at the election of the Governing Board to the lowest responsible and responsive bidder using the method and procedures outlined in the Notice Inviting Bids and as specified in the Section entitled Alternate/Deductive Bid Alternates.

a. Subcontractor Listing for Alternates. If alternate bids are called for and the bidder intends to use different or additional subcontractors, a separate list of subcontractors must be submitted for each such alternate.

15. Evidence of Responsibility. Upon the request of the District, a bidder whose bid is under consideration for the award of the Contract shall submit promptly to the District satisfactory evidence showing the bidder's financial resources, surety and insurance claims experience, construction experience, completion ability, workload, organization available for the performance of the Contract, and other factors pertinent to a Project of the scope and complexity involved.

16. Trade Contractor is experienced working with other Trade Contractors and shall carefully study the Outline Schedule in the Contract Documents to determine where Trade Contractor's Work shall occur and the relative congestion of the areas where Trade Contractor Work shall occur. Trade Contractor is also aware that CM will be building a Project Baseline Schedule based on the input of all Trade Contractors so the dates shown on the Outline Schedule are only approximate dates and durations. The Project Baseline Schedule shall be built through the input of all Trade Contractors and is subject to reasonable change during the course of the Project.

17. Listing Subcontractors. Each bidder shall submit with his bid, on the form furnished with the Contract Documents, a list of the names, license numbers and locations of the places of business of each subcontractor who will perform work or labor or render service to the bidder in or about the Project, or a subcontractor who under subcontract to the bidder, specially fabricates and installs a portion of the work, in an amount in excess of one-half of 1 percent of the bidder's total bid as required by the Subletting and Subcontracting Fair Practices Act (Public Contract Code Section 4100, et seq.). If the bidder fails to specify a subcontractor for any portion of the work to be performed under the Contract, the Bidder agrees to perform that portion of the work itself.

18. Workers' Compensation. In accordance with the provisions of Labor Code Section 3700, the successful bidder as the Trade Contractor shall secure payment of compensation to all employees. The Trade Contractor shall sign and file with the District the following certificate prior to performing the work under this contract: "I am aware of the provisions of Section 3700 of the Labor Code, which requires every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of that code, and I will comply with such provisions before commencing the performance of the work of this contract." The form of such certificate is included as a part of the Bid Documents.

19. Trade Contractor's License. To perform the work required by this notice, the Trade Contractor must possess the Contractor's License as specified in the Trade Contractor Scope of Work, and the Trade Contractor must maintain the license throughout the duration of the Contract. If, at the time of award of the Contract, bidder is not licensed to perform the Project in accordance with Division 3, Chapter 9, of the Business and Professions Code for the State of California and the Notice to Trade Contractors calling for bids, such bid will not be considered and the Trade Contractor will forfeit its bid security to the District.

20. Anti-Discrimination: It is the policy of the District that in connection with all work performed under contracts, there be no discrimination against any prospective or active employee engaged in the work because of race, color, ancestry, national origin, religious creed, sex, age, or marital status. The Contractor agrees to comply with applicable Federal and California laws including, but not limited to, the California Fair Employment Practice Act, beginning with Government Code Section 12900, Labor Code Section 1735, and Title 5, Division 1, Chapter 1, Subchapter 4 of the California Code of Regulations. In addition, the Contractor agrees to require like compliance by any subcontractors employed on the work by him.

21. Preference for Materials and Substitutions.

a. One Product Specified. Unless the Plans and Specifications state that no Substitution is permitted, whenever the Contract Documents indicate any specific article, device, equipment, product, material, fixture, patented process, form, method, construction, or any specific name, make, trade name, or catalog number, with or without the words, "or equal," such specification shall be read as if the language "or equal" is incorporated.

b. Request for Substitution. Bidder may, unless otherwise stated, offer any material, process, article, etc., which is materially equal or better in every respect to that so indicated or specified ("Specified Item") and will completely accomplish the purpose of the Contract Document. If bidder desires to offer a Substitution for a Specified Item, such bidder must make a request in writing on the District's Substitution Request Form ("Request Form") and submit the completed Request Form with the bidder's bid. The Request Form must be accompanied by evidence as to whether the proposed substitution:

- 1) Is equal in quality, service, and ability to the Specified Item as demonstrated by a side by side comparison of key characteristics and performance criteria (CSI comparison chart);
- 2) Will entail no changes in detail, construction and scheduling of related work;
- 3) Will be acceptable in consideration of the required design and artistic effect;
- 4) Will provide no cost disadvantage to the District;

- 5) Will require no excessive or more expensive maintenance, including adequacy and availability of replacement parts; and
- 6) Will require no change in the Contract Time.

In completing the Request Form, bidder must state with respect to each requested substitution whether bidder will agree to provide the Specified Item in the event that the District denies bidder's request for substitution of a Specified Item. In the event that bidder does not agree in the Request Form to provide the Specified Item and the District denies the requested Substitution, the bidder's bid shall be considered non-responsive and the District may award the Contract to the next lowest bidder or in its sole discretion, release all bidders. In the event that bidder has agreed in the Request Form to provide the Specified Item and the District denies bidder's requested substitution for a Specified Item, bidder shall execute the Agreement and provide the Specified Item without any additional cost or charge to the District, and if bidder fails to execute the Agreement with the Specified Item(s), bidder's bid bond will be forfeited.

The substitution review process is the process whereby a product is determined to be equal to that specified. The materials, products, and equipment described in the Contract Documents establish a standard of required function, dimension, appearance, and quality. Architect may consider requests for substitution of specified equipment, materials, or products only when requests are submitted in accordance with the provisions of the Contract Documents and are received by the Construction Manager within seven (7) calendar days of opening such bids. Any and all Drawings, specification, samples, performance data, calculations, and other information as may be required to assist the Architect and the District in determining whether the proposed substitution is acceptable. The burden of establishing these facts shall be upon the bidder.

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

22. Disqualification of Bidders and Proposals. More than one proposal for the same work from any individual, firm, partnership, corporation, or association under the same or different names will not be accepted; and reasonable grounds for believing that any bidder is interested in more than one proposal for the work will be cause for rejecting all proposals in which such bidder is interested and the bidder will forfeit their bid security to the District.

23. Unbalanced or Altered Bids. Proposals in which the prices are obviously unbalanced, and those which are incomplete or show any alteration of form, or contain any additions or conditional or alternate bids that are not called for or otherwise permitted, may be rejected. A proposal on which the signature of the bidder has been omitted may be rejected. If, in the District's sole discretion, it determines any pricing, costs or other information submitted by a bidder may result in an unbalanced bid, the District may deem such bid non-responsive. A bid may be determined by the District to be unbalanced if the bid is based on prices significantly less than cost for some work and prices which are significantly overstated in relation to cost for other work, and if there is a reasonable doubt that the bid will result in the lowest overall cost to the District even though it may be the low evaluated bid, or if it is so unbalanced as to be tantamount to allowing an advance payment.

24. Employment of Apprentices. The Trade Contractor and all Trade Contractor's Subcontractors shall comply with the provisions of California Labor Code including, but not limited to Sections 1777.5, 1777.6, and 1777.7 concerning the employment of apprentices. The Trade Contractor and any

Subcontractor under him shall comply with the requirements of said Sections, including applicable portions of all subsequent amendments in the employment of apprentices; however, the Trade Contractor shall have full responsibility for compliance with said Labor Code Sections, for all apprenticeable occupations, regardless of any other contractual or employment relationships alleged to exist.

25. Non-Collusion Declaration. Public Contract Code Section 7106 requires bidders to submit declaration of non-collusion with their bids. This form is included with the bid documents and must be signed and dated by the bidder under penalty of perjury.

26. Wage Rates, Travel and Subsistence.

a. The Trade Contractor and Trade Contractor's subcontractors shall comply with the requirements set forth in Division 2, Part 7, Chapter 1 of the Labor Code. Pursuant to Labor Code Sections 1770 et seq., the District has obtained from the Director of the Department of Industrial Relations the general prevailing rate of per diem wages and the general prevailing rate for holiday and overtime work in the locality in which this work is to be performed for each craft, classification or type of worker needed to execute the contract. Copies are available from the District to any interested party on request and are also available from the Director of the Department of Industrial Relations. The Trade Contractor shall obtain copies of the above-referenced prevailing wage sheets and post a copy of such wage rates at appropriate, conspicuous, weatherproof points at the Site.

b. Any worker employed to perform work on the Project and such work is not covered by any classification listed in the published general prevailing wage rate determinations or per diem wages determined by the Director of the Department of Industrial Relations, shall be paid not less than the minimum rate of wages specified therein for the classification which most nearly corresponds to the employment of such person in such classification.

c. Holiday and overtime work, when permitted by law, shall be paid for at the rate set forth in the prevailing wage rate determinations issued by the Director of the Department of Industrial Relations or at least one and one-half (1½) times the specified basic rate of per diem wages, plus employer payments, unless otherwise specified in the Contract Documents or authorized by law.

d. These per diem rates, including holiday and overtime work, and employer payments for health and welfare, pension, vacation, and similar purposes, are on file at the administrative office of the District, located as noted above and are also available from the Director of the Department of Industrial Relations. It is the Trade Contractor's responsibility to ensure the appropriate prevailing rates of per diem wages are paid for each classification. It shall be mandatory upon the Trade Contractor to whom the Contract is awarded, and upon any subcontractor under such Trade Contractor, to pay not less than the said specified rates to all workers employed by them in the execution of the Contract.

27. DIR Registration of Contractor and Subcontractors. A Contractor or Subcontractor shall not be qualified 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, as defined in this chapter, unless currently registered and qualified to perform public work pursuant to Section 1725.5. It is not a violation of this section for an unregistered contractor to submit a bid that is authorized by Section 7029.1 of the Business and Professions Code or by Section 10164 or 20103.5 of the Public Contract Code, provided the contractor is registered to perform public work pursuant to Section 1725.5 at the time the contract is awarded. This Project is a public works project as defined in Labor Code section 1720. Each Contractor bidding on this Project and all Subcontractors (of any tier) performing any portion of the Work must comply with the Labor Code sections 1725.5 and 1771.1 and must be properly and currently registered with the California Department of Industrial Relations ("DIR") and qualified to perform public works pursuant to Labor Code section 1725.5 throughout the duration of the Project. For more information and up to date requirements, Contractors are recommended to periodically review the DIR's website at www.dir.ca.gov. Contractor shall be solely responsible for ensuring compliance with Labor

Code section 1725.5 as well as any requirements implemented by DIR applicable to its services or its Subcontractors throughout the term of the Agreement and in no event shall Contractor be granted increased payment from the District or any time extensions to complete the Project as a result of Contractor's efforts to maintain compliance with the Labor Code or any requirements implemented by the DIR. Failure to comply with these requirements shall be deemed a material breach of this Agreement and grounds for termination for cause. The Contractor and all Subcontractors shall furnish certified payroll records as required pursuant Labor Code section 1776 directly to the Labor Commissioner in accordance with Labor Code section 1771.4 on at least on a monthly basis (or more frequently if required by the District or the Labor Commissioner) and in a format prescribed by the Labor Commissioner. The District reserves the right to withhold contract payments if the District is notified, or determines as the result of its own investigation, that Contractor is in violation of any of the requirements set forth in Labor Code section 1720 et seq. at no penalty or cost to the District. Monitoring and enforcement of the prevailing wage laws and related requirements will be performed by the Labor Commissioner/ Department of Labor Standards Enforcement (DLSE).

28. No Telephone or Facsimile Availability. No telephone or facsimile machine will be available to bidders on the District premises at any time.

29. Obtaining Bidding Documents. Bidding Documents, may be obtained from:
Prospective contract bidders may secure documents in electronic format online only through "Bid Mail" using the following link: or by contacting the District's Construction Manager:
<https://share.bidmail.com/quickplans/quickplans.aspx?cmd=LTAwMTM3ODQzODA5MC4wNTI4MjE0LTAzNjkyMy0wNzg2OS0wMDEyMTE2NDA3LTUyMTk1LjQ4NTM5MTE0>

**LEDESMA & MEYER CONSTRUCTION COMPANY INC
9441 HAVEN AVENUE
RANCHO CUCAMONGA CA 91730**

**Maria Bautista, Sr. Project Coordinator, Phone number: [909-476-0590](tel:909-476-0590)
Email: mariab@lmcci.com.**

Each bid must conform and be responsive to all pertinent Bidding and Contract Documents. Copies are on file and open for public inspection at the District Office.

For information regarding this project, prospective bidders are requested to contact **LEDESMA & MEYER CONSTRUCTION COMPANY INC, 9441 HAVEN AVENUE, RANCHO CUCAMONGA, CALIFORNIA, 91730-5844, (phone #(909) 476-0590, fax #(909) 476-0592).**

Bidder shall utilize a complete set of Bidding Documents in preparing a bid. The failure or omission of bidder to receive any Bidding Document, form, instrument, Addendum, or other document shall not relieve bidder from any obligations with respect to the bid and/or Contract.

30. Addenda. Clarification or any other notice of a change in the Bidding Documents will be issued only by the District and only in the form of a written Addendum, transmitted by fax, e-mail, or available for pick up to all who are known by the issuing office to have received a complete set of Bidding Documents. Any other purported Addenda are void and unenforceable.

Bidder is responsible for ascertaining the disposition of all Addenda issued regardless of District notification and to acknowledge all Addenda in the submitted sealed bid prior to the bid opening. Copies of Addenda will be made available for inspection wherever Bidding Documents are on file for inspection. Each Addendum will be numbered, dated, and identified with the Project number. Oral statements or any instructions in any form, other than Addendum as described above, shall be void and unenforceable.

Addenda issued by the District and not noted as being acknowledged by bidder as required in the Bid Form, may result in the bid being deemed non-responsive.

31. Debarment. Bidder may also be subject to debarment, in addition to seeking remedies for False Claims under Government Code Section 12650 et seq. and Penal Code Section 72, the District may debar a Trade Contractor pursuant to Article 15 of the General Conditions if the Board, or the Board may designate a hearing officer who, in his or her discretion, finds the Trade Contractor has done any of the following:

- a. Intentionally or with reckless disregard, violated any term of a contract with the District
- b. Committed an act or omission which reflects on the Trade Contractor's quality, fitness or capacity to perform work for the District;
- c. Committed an act or offense which indicates a lack of business integrity or business honesty; or
- d. Made or submitted a false claim against the District or any other public entity (See Government Code Sections 12650, et seq., and Penal Code Section 72)

32. Forfeiture for Failure to Post Security and Execute Agreement: In the event the bidder to whom the Notice of Award is given fails or refuses to post the required bonds and return executed copies of the Agreement within **FIVE (5)** days from the date of receiving said Notice of Award, the District may declare the bidder's bid deposit or bond forfeited as damages caused by the failure of the bidder to post such security and execute such copies of the Agreement, and may give Notice of Award to the next lowest responsible bidder, or may call for new bids. It is agreed that calculation of damages that the District may suffer as a result of Bidder's failure to enter into a Contract with the District would be extremely difficult and impractical to determine and that the amount of the Bidder's required bid security shall be agreed and conclusively presumed to be the amount of said damages.

33. **EXECUTIVE ORDER N-6-22: SANCTIONS AGAINST RUSSIA**: On March 4, 2022, Governor Gavin Newsom issued Executive Order N-6-22 (the EO) 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 or proposal, Contractor represents that it is not a target of Economic Sanctions. 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 rejection of the Contractor's bid/proposal any time prior to contract execution, or, if determined after contract execution, shall be grounds for termination by the State.

END OF SECTION

PRE-BID CLARIFICATION FORM (For Contractor's Use)

PROJECT NAME:	STUDEBAKER ES – FLOORING & INTERIOR PAINTING		
TO:	Maria Bautista Jaime Velasquez	EMAIL:	mariab@lmcci.com ; jaimbev@lmcci.com

DATE:			
FROM:		EMAIL:	
DOCUMENT/DIVISION NUMBER:		DRAWING NUMBER:	

REQUESTED CLARIFICATION:

RESPONSE TO CLARIFICATION:

Attach additional numbered sheets as necessary; however, only one (1) request shall be contained on each submitted form.

END OF DOCUMENT

REQUEST FOR SUBSTITUTION

Pursuant to Public Contract Code Section 3400, bidder submits the following request to Substitute with the bid that is submitted. I understand that if the request to substitute is not “and/or equal” or is not accepted by District and I answer “no” I will not provide the specified item, then I will be held non-responsive and my bid will be rejected. With this understanding, I hereby request Substitution of the following articles, devices, equipment, products, materials, fixtures, patented processes, forms, methods, or types of construction:

	Specification Section	Specified Item	Requested Substituted Item	Trade Contractor Agrees to Provide Specified Item if request to Substitute Denied ¹ (circle one)		District Decision (circle one)	
				Yes	No	Grant	Deny
1.				Yes	No	Grant	Deny
2.				Yes	No	Grant	Deny
3.				Yes	No	Grant	Deny
4.				Yes	No	Grant	Deny
5.				Yes	No	Grant	Deny
6.				Yes	No	Grant	Deny
7.				Yes	No	Grant	Deny
8.				Yes	No	Grant	Deny
9.				Yes	No	Grant	Deny
10.				Yes	No	Grant	Deny
11.				Yes	No	Grant	Deny
12.				Yes	No	Grant	Deny

This Request Form must be accompanied by evidence as to whether the proposed Substitution (1) is equal in quality, service, and ability to the Specified Item; (2) will entail no change in detail, construction, and scheduling of related work; (3) will be acceptable in consideration of the required design and artistic effect; (4) will provide no cost disadvantage to the District; (5) will require no excessive or more expensive maintenance, including adequacy and availability of replacement parts; (6) will require no change of the construction schedule or milestones for the Project; and, (7) Trade Contractor agrees to pay for any DSA Fees or other Governmental Plan check costs associated with this Substitution Request. (See General Conditions Section 3.6)

¹ Bidder must state whether bidder will provide the Specified Item in the event the Substitution request is evaluate and denied. If bidder states that bidder will not provide the Specified Item the denial of a request to Substitute shall result in the rejection of the bidder as non-responsive. However, if bidder states that bidder will provide the Specified Item in the event that bidder’s request for Substitution is denied, bidder shall execute the Agreement and provide the Specified Item(s). If bidder refuses to execute the Agreement due to the District’s decision to require the Specified Item(s) at no additional cost, bidder’s Bid Bond shall be forfeited.

The undersigned states that the following paragraphs are correct:

1. The proposed Substitution does not affect the dimensions shown on the Drawings.
2. The undersigned will pay for changes to the building design, including Architect, engineering, or other consultant design, detailing, DSA plan check or other governmental plan check costs, and construction costs caused by the requested substitution.
3. The proposed substitution will have no adverse effect on other trades, the Contract Time, or specified warranty requirements.
4. Maintenance and service parts will be available locally for the proposed substitution.
5. In order for the Architect to properly review the substitution request, within five (5) days following the opening of bids, the Trade Contractor shall provide samples, test criteria, manufacturer information, and any other documents requested by Architect or Architect's engineers or consultants, including the submissions that would ordinarily be required under Article 3.7 for Shop Drawings along with a document which provides a side by side comparison of key characteristics and performance criteria (often known as a CSI side by side comparison chart).
6. If Substitution Request is accepted by the District, Trade Contractor is still required to provide a Submittal for the substituted item pursuant to Article 3.7 and shall provide required Schedule information (including schedule fragnets, if applicable) for the substituted item as required under Article 8.3.12. The approval of the Architect, Engineer, or District of the substitution request does not mean that the Trade Contractor is relieved of Trade Contractor's responsibilities for Submittals, Shop Drawings, and schedules under Article 3.7 and 8.3.2 if the Trade Contractor is awarded the Project.

Name of Bidder: _____

By: _____

District: _____

By: _____

CHECKLIST OF BID FORMS TO BE SUBMITTED AT TIME OF BID

(For Trade Contractor's use and reference only. Additional documents may be required so bidders should carefully review all Contract Documents and Bid Documents)

If a bidder is submitting a bid for more than one bid category, the bidder must submit a separate bid package and all required documents for each bid category.

- 00 03 00 - Bid Form
- 00 03 01 - Bidder Questionnaire
(To be submitted simultaneously with Bid Form when Pre-Qualification is not required)
- 00 03 01-1 - DIR Registration Verification
- 00 03 01-2 – Acknowledgement of Bidding Practices Regarding Indemnity
- 00 04 10 Bid Bond (or Bid Guarantee Form if Security is Other Than Bid Bond)
- 00 04 30 - Designation of Subcontractors Form
- 00 04 80 - Non-Collusion Declaration
- 00 04 90 - DVBE Participation Statement

BID FORM

TO: **LITTLE LAKE CITY SCHOOL DISTRICT**, acting by and through its Governing Board, herein called "District".

FROM: _____
(Proper Name of Bidder)

Dept. of Industrial Relations Public Works Contractor Registration # _____

1. Pursuant to and in compliance with your Notice Inviting Bids and other documents relating thereto, the undersigned bidder, having familiarized himself with the terms of the contract, the local conditions affecting the performance of the contract and the cost of the work at the place where the work is to be done, hereby proposes and agrees to perform within the time stipulated, the contract, including all of its component parts, and everything required to be performed, including its acceptance by the District, and to provide and furnish any and all of the labor, materials, tools, expendable equipment, and all utility and transportation services necessary to perform the contract and complete in a workmanlike manner all of the work required in connection with the following:

Bid Package(s) _____ for the construction of the project known as **STUDEBAKER ES – FLOORING & PAINTING** in District described above, all in strict conformance with the drawings and other contract documents on file at the Business Office of said District for amounts set forth herein.

2. ADDENDA

The undersigned has thoroughly examined any and all Addenda (if any) issued during the bid period and is thoroughly familiar with all contents thereof and acknowledges receipt of the following Addenda: (Bidder to list all addenda).

Number	Number	Number	Number	Number	Number	Number	Number
_____	_____	_____	_____	_____	_____	_____	_____

3. BASE BID (Numerical)
(Not to include cost for Allowance) \$ _____

ALLOWANCE (Numerical)
(See Spec Section 01 21 00) \$ _____

TOTAL BASE BID & ALLOWANCE (Numerical) \$ _____

TOTAL BASE BID & ALLOWANCE (in Words) _____

_____ DOLLARS

4. ALTERNATE BIDS

The following amounts shall be added to or deducted from the Base Bid at the District's option. Alternates are fully described in Section 01 01 90 – Contract Considerations.

Alternate No. 1 = (add) (deduct) \$ _____

Alternate No. 2 = (add) (deduct) \$ _____

5. **TIME FOR COMPLETION:** The aggregate sum total work of all individual prime contractors to the District comprises the entire “Project” and shall be commenced and completed in conformance with the Project Construction Schedule. The entire Project shall be completed within **131 consecutive calendar days with Substantial Completion being completed within 101 consecutive calendar days.** Bidder acknowledges liability for liquidated damages in the amount stipulated in the Agreement, and not as a penalty, for each calendar day of the delay for which Contractor has contributed to or caused until the complete project is completed and accepted.
6. It is understood that the District reserves the right to reject this bid and that the Bid shall remain open to acceptance and is irrevocable for a period of **NINETY (90)** days.
7. The following documents are attached hereto:
 - i. Document 00 03 01 Bidder Questionnaire
IMPORTANT NOTICE: This project is subject to DIR Public Works Funding Legislation - SB 854. To bid on this Project, the Prime Bidder and all of Prime Bidder’s Subcontractors are required to be registered online as a “public works contractor” with the California Department of Industrial Relations at www.dir.ca.gov and each shall pay an annual non-refundable fee via credit card.
 - ii. Document 00 03 01-1 DIR Registration Verification
 - iii. Document 00 03 01-2 Acknowledgement of Bidding Practices Regarding Indemnity
 - iv. Document 00 04 10 Bid Bond
 - v. Document 00 04 30 Designation of Subcontractors. Bidder understands and acknowledges that all subcontractors providing goods and services in excess of \$100,000.00 must be bonded.
 - vi. Document 00 04 80 Non-collusion Declaration
 - vii. Document 00 04 90 Certification – Participation of Disabled Veteran Business Enterprises
8. **Site Visit Certification:**

By submission of this bid, the Bidder hereby certifies that it’s estimating and management staff has visited the site of the proposed work and is fully acquainted with the conditions relating to construction and labor. Bidder fully understands the facilities, difficulties, and restrictions attending the execution of the work under contract and has also relayed is this information to all listed subcontractors and suppliers. Bidder fully indemnifies **LITTLE LAKE CITY SCHOOL DISTRICT**, the Architect, the Construction Manager and all of their respective officers, agents, employees, and consultants from any damage, or omissions, related to conditions that could have been identified during a visit to the site.
9. The Bidder specifically acknowledges and understands that if it is awarded the Contract, that it shall perform the Work of the Project while fully cooperating and complying with all of the applicable provisions of the District's labor compliance program. The undersigned Bidder hereby certifies that Bidder is able to furnish labor that can work in harmony with all other elements of labor employed or to be employed on the Work.
10. Bidder expressly acknowledges that it is aware that if a false claim is knowingly submitted (as the terms “claims” and “knowingly” are defined in the California False Claims Act, CA Gov. Code,

§2650 et. Seq.), the District will be entitled to civil remedies set forth in the California False Claims Act. It may also be considered fraud and the Contractor may be subject to criminal prosecution.

11. It is understood and agreed that if written notice of the acceptance of this bid is mailed, telegraphed, or delivered to the undersigned after the opening of the bid, and within the time this bid is required to remain open, or at any time thereafter before this bid is withdrawn, the undersigned will execute and deliver to the District a contract in the form attached hereto in accordance with the bid as accepted, and that he will also furnish and deliver to the District **THREE (3)** executed copies of the Performance Bond and Payment Bond as specified, all within **FIVE (5)** days after receipt of Notice Of Award letter, and that the work under the contract shall be commenced by the undersigned bidder, if awarded the contract, on the date to be stated in the District's "Notice To Proceed", and shall be completed by the Contractor in the time specified in the contract documents.
12. Notice of Award letter or other correspondence should be addressed to the undersigned at the address stated below.
13. The names of all persons interested in the foregoing proposal as principals are as follows:

(IMPORTANT NOTICE: If bidder or other interested person is a corporation, state legal name of corporation, also names of the president, secretary treasurer, and manager thereof; if a co-partnership, state true name of firm, also names of all individual co-partners composing firm; if bidder or other interested person is an individual, state first and last names in full.)

14. The undersigned bidder declares that he or she is licensed in accordance with the act providing for registration of contractors and the documentation of licensure is as follows:

	License #	Classification	Expiration Date
1.	_____	_____	_____
2.	_____	_____	_____
3.	_____	_____	_____

If the bidder is a joint venture, each member of the joint venture must include the above information.

The undersigned certifies (or declares) under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

15. In the event the bidder to whom Notice of Award is given fails or refuses to post the required bonds and return executed copies of the agreement form within **FIVE (5)** calendar days from the date of receiving the Notice of Award, the District may declare the Bidder's bid deposit or bond forfeited as damages.

16. Pursuant to Section 4552 of the Government code, in submitting a bid to the District, the bidder offers and agrees that if the bid is accepted, it will assign to District all rights, title, and interest in and to all causes of action it may have under Section 4 of the Clayton Act (15 U.S.C. Section 15) or under the Cartwright Act (Chapter 2 (commencing with Section 16700) of Part 2 of Division 7 of the Business and Professions Code), arising from purchases of goods, materials, or services by the bidder for sale to the purchasing body pursuant to the bid. Such assignment shall be made and become effective at the time the purchasing body tenders final payment to the bidder.
17. Bidder hereby automatically certifies, by submission of this bid form, that Bidder is fully knowledgeable of and in full compliance with California Public Contract Code Sections 2201-2208 (AKA: Iran Contracting Act) by either Option #1 "Certification" or Option #2 "Exemption".

NAME _____

ADDRESS _____

NAME _____

ADDRESS _____

DATE: _____

PROPER NAME OF BIDDER

BY: _____
SIGNATURE OF BIDDER

BY: _____
SIGNATURE OF BIDDER

NOTE: If bidder is a corporation, the legal name of the corporation shall be set forth above together with the signature of authorized officers or agents and the document shall bear the corporate seal; if bidder is partnership, the true name of the firm shall be set forth above together with the signature of the partner or partners authorized to sign contracts on behalf of the partnership; and if bidder is an individual, his signature shall be placed above.

Street Address: _____

City, State, Zip Code: _____

Mailing Address: _____

City, State, Zip Code: _____

Telephone: FAX: _____

END OF DOCUMENT

BIDDER QUESTIONNAIRE

(Must be submitted simultaneously with Bid Form when Pre-Qualification is not required)

NAME OF BIDDER: _____

1. Have you, or any of the principals, officers, or directors of your company, been principals, officers or directors in another company within the past 5 years?

- a. _____ No
- b. _____ Yes

2. If the answer to question #1 above is yes, please complete the following historical information for the past 5 years (attach additional pages if necessary).

- a. Name of person: _____
 - i. Current position in this company: _____
 - ii. Number of years of service with this company: _____
 - iii. Past history:
 - (1) Company name: _____
Years of service from: _____ to _____
 - (2) Company name: _____
Years of service from: _____ to _____

- b. Name of person: _____
 - i. Current position in this company: _____
 - ii. Number of years of service with this company: _____
 - iii. Past history:
 - (1) Company name: _____
Years of service from: _____ to _____
 - (2) Company name: _____
Years of service from: _____ to _____

- c. Name of person: _____
 - i. Current position in this company: _____
 - ii. Number of years of service with this company: _____
 - iii. Past history:
 - (1) Company name: _____
Years of service from: _____ to _____
 - (2) Company name: _____
Years of service from: _____ to _____

3. Has your company ever abandoned a project, been removed from a project, or been declared "non-responsible" by a School District within the last 5 years?

- a. _____ No
- b. _____ Yes

4. Has your company ever filed a claim against a school district in the State of California within the last 5 years?

- a. No
- b. Yes
5. Have you or any of your current company principals or corporate officers worked at or for a company within the last 5 years that filed a claim against a school district in the State of California?
- a. No
- b. Yes
6. If the answer to either question #4 or #5 above is yes, please complete the following information for each District (if additional space is needed, please attach additional paper as needed):
- a. District Name: _____
- i. Project Name: _____
- (1) Date filed: _____
- (2) Name of company filing the claim: _____
- (3) Total amount of all claims: _____
- (4) Is claim resolved: Yes No
- (5) Type of claim(s) (please check all that apply):
- delay
- cost of work either added or deleted by change order
- disputed work scope
- other - explain: _____
- _____
- _____
- (6) Architectural firm: _____
- (7) Were you a "Prime" contractor? Yes No
- b. District Name: _____
- i. Project Name: _____
- (1) Date filed: _____
- (2) Name of company filing the claim: _____
- (3) Total amount of all claims: _____
- (4) Is claim resolved: Yes No
- (5) Type of claim(s) (please check all that apply):
- delay
- cost of work either added or deleted by change order
- disputed work scope
- other - explain: _____
- _____
- _____
- (6) Architectural firm: _____
- (7) Were you a "Prime" contractor? Yes No

I hereby certify that as an owner, partner, or corporate officer of this company, I have fully researched the above information and that I have provided complete and accurate information. I also understand and

accept that if it is learned at a later date that I have not provided truthful or complete answers, my bid may be declared non-responsive by the District. If it is determined at any time after the award of a contract by the District that the above information was not answered truthfully or completely, the District may terminate my contract and seek to complete the remaining work under this contract at my expense.

Signature of Owner, Partner or Corporate Officer

Date Signed

Typed or printed name of signatory

Position

END OF DOCUMENT

DIR REGISTRATION VERIFICATION

I am the _____ of _____ (“Bidder”)
(Title/Position) (Bidder Name)

submitting the accompanying Bid Proposal for the Work described as **STUDEBAKER ES – FLOORING & INTERIOR PAINTING.**

1. The Bidder is currently registered as a contractor with the Department of Industrial Relations (“DIR”).
2. The Bidder’s DIR Registration Number is: _____. The expiration date of the Bidder’s DIR Registration is _____, 20__.
3. If the Bidder is awarded the Contract for the Work and the expiration date of the Bidder’s DIR Registration will occur: (i) prior to expiration of the Contract Time for the Work; or (ii) prior to the Bidder completing all obligations under the Contract for the Work, the Bidder will take all measures necessary to renew the Bidder’s DIR Registration so that there is no lapse in the Bidder’s DIR Registration while performing Work under the Contract.
4. The Bidder, if awarded the Contract for the Work will remain a DIR registered contractor for the entire duration of the Work.
5. The Bidder has independently verified that each Subcontractor identified in the Subcontractors List submitted with the Bid Proposal of the Bidder is currently a DIR registered contractor.
6. The Bidder has provided the DIR Registration Number for each subcontractor identified in the Bidder’s Subcontractors’ List or within twenty-four (24) hours of the opening of Bid Proposals for the Work, the Bidder will provide the District with the DIR Registration Number for each subcontractor identified in the Bidder’s Subcontractors List.
7. The Bidder’s solicitation of subcontractor bids included notice to prospective subcontractors that: (i) all sub-tier subcontractors must be DIR registered contractors at all times during performance of the Work; and (ii) prospective subcontractors may only solicit sub-bids from and contract with lower-tier subcontractors who are DIR registered contractors.
8. If any of the statements herein are false or omit material facts rendering a statement to be false or misleading, the Bidder’s Bid Proposal is subject to rejection for non-responsiveness.

I have personal first hand-knowledge of all of the foregoing. I declare under penalty of perjury under California law that the foregoing is true and correct.

Executed this ____ day of _____, 20__ at _____
City and State)

(Signature)

(Name, typed or printed)

END OF DOCUMENT

ACKNOWLEDGMENT OF BIDDING PRACTICES REGARDING INDEMNITY FORM

TO: LITTLE LAKE CITY SCHOOL DISTRICT

RE: STUDEBAKER ES – FLOORING & INTERIOR PAINTING

Construction Contract for Bid Category(s)_____

Please be advised that with respect to the above-referenced Project the undersigned Trade Contractor on behalf of itself and all Trade Contractor’s subcontractors hereby waives the benefits and protection of Labor Code Section 3864, which provides:

“If an action as provided in this chapter is prosecuted by the employee, the employer, or both jointly against the third person results in judgment against such third person, the employer shall have no liability to reimburse or hold such third person harmless on such judgment or settlement in the absence of a written agreement to do so executed prior to the injury.”

This Agreement has been signed by an authorized representative of the contracting party and shall be binding upon its successors and assignees. The undersigned further agrees to promptly notify the District of any changes of ownership of the contracting party or any subcontractor while this Agreement is in force.

Contracting Party

Name of Agent/Title (Typed or Printed)

Signature

Date

END OF DOCUMENT

BID BOND

KNOW ALL MEN BY THESE PRESENTS, that we _____,
as Principal, and _____, as Surety, an admitted
Surety insurer pursuant to Code of Civil Procedure, Section 995.120, legally doing business in
California at _____, are held and firmly bound unto the
LITTLE LAKE CITY SCHOOL DISTRICT, hereinafter called the District, in the penal sum
of TEN PERCENT (10%) OF THE TOTAL AMOUNT OF THE BID of the Principal submitted
to the said District for the work described below for the payment of which sum is lawful money
of the United States, well and truly to be made, we bind ourselves, our heirs, executors,
administrators, successors and assigns, jointly and severally, firmly by these presents.

The condition of the above obligation is such that whereas the Principal has submitted to
the District the accompanying Bid dated _____, 20____, attached hereto and
hereby made a part hereof, to enter into a Contract in writing for the construction of Bid Package
Category Number(s) _____ for the complete project known
generally as:

**DISTRICT BID NO. 23-24-001
STUDEBAKER ES – FLOORING & INTERIOR PAINTING
at
11800 HALCOURT AVENUE, NORWALK, CA 90650**

NOW THEREFORE, the Principal shall not withdraw said bid within **NINETY (90)**
days after said opening; and the Principal, when given Notice of Award., shall within **FIVE (5)**
days after the prescribed forms are presented to him for signature, return executed copies of the
Agreement to the District, in accordance with the bid as accepted and give bond with good and
sufficient surety or sureties, as may be required, for the faithful performance and proper
fulfillment of such contract and for the payment for labor and materials used for the performance
of the contract, or in the event of the withdrawal of said bid within the period specified or the
failure to enter into such contract and give such bonds within the time specified, the Principal
shall pay the District the difference between the amount specified in said bid and the amount for
which the District may procure the required work and/or supplies if the latter amount be in
excess of the former, together with all costs incurred by the District in again calling for bids, then
the above obligation shall be void and of no effect, otherwise to remain in full force and virtue.

Then this obligation shall be void; otherwise, the same shall remain in force and effect.

Surety, for value received, hereby stipulates and agrees that no change, extension of time,
alteration, or addition to the terms of the Contract, or the call for bids, or the work to be
performed there under, or the specifications accompanying the same, shall in anyway affect its
obligation under this bond, and it does hereby waive notice of any such change, extension of
time, alteration, or addition to the terms of said Contract, or the call for bids, or the work, or to
the specifications.

In the event suit is brought upon this bond by the District and judgment is recovered, the
Surety shall pay all costs incurred by the District in such suit, including without limitation,
attorneys' fees to be fixed by the court.

IN WITNESS WHEREOF, Principal and Surety have hereunto set their hands and seals, and such of them as are corporations have caused their corporate seals to be hereto affixed and these presents to be signed by their proper officers, on the day and year first set forth above.

(Corporate Seal)

By _____
Principal's Signature

Typed or Printed Name

Principal's Title

(Corporate Seal)

By _____
Surety's Signature

Typed or Printed Name

Title

(Attached Attorney in Fact Certificate)

Surety's Name

Surety's Address

Surety's Phone Number

END OF DOCUMENT

DOCUMENT 00 04 10-1

BID GUARANTEE

(Use only when not using a Bid Bond)

Accompanying this proposal is a cashier's check payable to the order of the **LITTLE LAKE CITY SCHOOL DISTRICT** or a certified check payable to the order of the **LITTLE LAKE CITY SCHOOL DISTRICT** in an amount equal to ten percent (10%) of the base bid and alternates (\$_____).

The proceeds of this check shall become the property of said District, if, this proposal shall be accepted by the District through the District's Governing Board, and the undersigned fails to execute a Contract with and furnish the sureties required by the District within the required time; otherwise, said check is to be returned to the undersigned.

Bidder

END OF DOCUMENT

DESIGNATION OF SUBCONTRACTORS

In compliance with the Subletting and Subcontracting Fair Practices Act (California Public Contract Code Sections 4100 et seq.) and any amendments thereof, each Bidder shall set forth below: (a) the name, license number, and location of the place of business of each subcontractor who will perform work or labor or render service to the Trade Contractor, who will perform work or labor or work or improvement to be performed under this Trade Contract, or a subcontractor licensed by the State of California who, under subcontract to the Trade Contractor, specially fabricates and installs a portion of the work or improvements according to detailed Drawings contained in the Plans and Specifications in an amount in excess of one-half of one percent of the Trade Contractor's total bid; and (b) the portion and description of the work which will be done by each subcontractor under this Act. The Trade Contractor shall list only one subcontractor for each such portion as is defined by the Trade Contractor in this bid. All subcontractors shall be properly licensed by the California State Licensing Board.

If a Trade Contractor fails to specify a subcontractor, or if a Trade Contractor specifies more than one subcontractor for the same portion of work to be performed under the Contract in excess of one-half of one percent of the Trade Contractor's total bid, the Trade Contractor shall be deemed to have agreed that the Trade Contractor is fully qualified to perform that portion, and that the Trade Contractor alone shall perform that portion of the Work.

No Trade Contractor whose bid is accepted shall (a) substitute any subcontractor, (b) permit any subcontractor to be voluntarily assigned or transferred or allow the relevant portion of the work to be performed by anyone other than the original subcontractor listed in the original bid, or (c) sublet or subcontract any portion of the work in excess of one-half of one percent of the Trade Contractor's total bid where the original bid did not designate a subcontractor, except as authorized in the Subletting and Subcontracting Fair Practices Act.

Subletting or subcontracting of any portion of the work in excess of one-half of one percent of the Trade Contractor's total bid where no subcontractor was designated in the original bid shall only be permitted in cases of public emergency or necessity, and then only after a finding, reduced to writing as a public record, of the authority awarding this Contract setting forth the facts constituting the emergency or necessity.

All subcontractors (of any tier) performing any portion of the Work must comply with the Labor Code sections 1725.5 and 1771.1 and must be properly and currently registered with the California Department of Industrial Relations and qualified to perform public works pursuant to Labor Code section 1725.5 throughout the duration of the Project.

NOTE: If alternate bids are called for and bidder intends to use different or additional subcontractors on the alternates, a separate list of subcontractors must be provided for each such Alternate.

DESIGNATION OF SUBCONTRACTORS FORM

Description & Portion of Work	Name of Subcontractor	Location & Place of Business	License Type and Number	<i>E-Mail & Telephone*</i>	<i>DIR Registration Number*</i>

Proper Name of Bidder: _____
 Date: _____
 Name: _____
 Signature of Bidder _____
 Representative: _____
 Address: _____
 Phone: _____

END OF DOCUMENT

NON-COLLUSION DECLARATION

The undersigned declares:

I am the _____ [Title] of _____ [Name of Company], 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: _____

Typed Name: _____

END OF DOCUMENT

DOCUMENT 00 04 90
**CERTIFICATION – PARTICIPATION OF
DISABLED VETERAN BUSINESS ENTERPRISES
IN ACCORDANCE WITH EDUCATION CODE 17076.11**

In accordance with Education Code Section 17076.11, the **LITTLE LAKE CITY SCHOOL DISTRICT** has a participation goal for Disabled Veteran Business Enterprises of at least three percent (3%) per year of the overall dollar amount of funds allocated by the District by the State Allocation Board pursuant to the Leroy F. Greene School Facilities Act of 1998 for construction or modernization of school buildings and expended each year by the District. At the time of execution of the contract, the Contractor will provide a statement to the District of anticipated participation of Disabled Veteran Business Enterprises in the contract. Prior to, and as a condition precedent for final payment under the contract, the Contractor will provide appropriate documentation to the District identifying the amount paid to Disabled Veteran Business Enterprises pursuant to the contract, so that the District can assess its success at meeting this goal.

I certify that I have read the above and will comply with the anticipated participation of Disabled Veteran Business Enterprises in this contract.

Signature

Typed or Printed Name

Title

Company

Address

City, State, Zip

Telephone

Fax

Email

Date

END OF DOCUMENT

DVBE CLOSE-OUT STATEMENT (FINAL PAYMENT)

The Trade Contractor shall complete this form, as a condition to Final Payment, for purposes of reporting participation by Disabled Veteran Business Enterprises (DVBE) in the Contract for the Project/Bid No. specified below.

Project Name: _____

Bid No.: _____

DSA No.: _____

Name	Address/Phone	Category of Work*	\$ Amount of Contract

* Categories of work include: (1) construction services (specify services that DVBE will provide); (2) architecture and engineering services; (3) procurement of materials, supplies and equipment; and (4) information technology.

The undersigned, on behalf of the Trade Contractor, certifies that DVBE participation on the Trade Contract for Bid No. _____ equaled _____ dollars (\$ _____), which represents approximately ____ percent (____%) of the total Trade Contract price including change orders for the Project.

Company: _____

Name: _____

Title: _____

Signature: _____

Date: _____

END OF DOCUMENT

AGREEMENT

THIS AGREEMENT, entered into this ___ day of _____, 20__ in the County of **LOS ANGELES** of the State of California, by and between the **LITTLE LAKE CITY SCHOOL DISTRICT**, hereinafter called the “District”, and _____, hereinafter called the “Trade Contractor”.

WITNESSETH that the District and the Trade Contractor for the consideration stated herein agree as follows:

ARTICLE I - SCOPE OF WORK: The Trade Contractor shall furnish all labor, materials, equipment, tools, and utility and transportation services, and shall coordinate and sequence Trade Contractor’s Work under the Direction of Construction Manager and District and in cooperation with other Trade Contractors on the Project to perform and complete all Work required in connection with Trade Contract Number(s) _____ for the complete project known generally as:

STUDEBAKER ES – FLOORING & INTERIOR PAINTING

Located at **11800 HALCOURT AVENUE, NORWALK, CA 90650**

in strict accordance with the Contract Documents enumerated in Article 7 below. The Trade Contractor shall be liable to the District for any damages arising as a result of a failure to comply with that obligation, and the Trade Contractor shall not be excused with respect to any failure to so comply by an act or omission of the Construction Manager, Architect, Engineer, Inspector, Division of the State Architect (DSA), or representative of any of them, unless such act or omission actually prevents the Trade Contractor from fully complying with the Contract Documents and the Trade Contractor protests, in accordance with the requirements of the Contract Documents, that the act or omission is preventing the Trade Contractor from fully complying with the Contract Documents. Such protest shall not be effective unless reduced to writing and filed with the District office within seven (7) days of the date of occurrence of such act or omission preventing the Trade Contractor from fully complying with the Contract Documents.

ARTICLE 2 - TIME OF COMPLETION: The District may give notice to proceed within ninety (90) days of the award of the bid by the District. Once the Trade Contractor has received a notice to proceed, the Trade Contractor shall develop a Trade Contractor Baseline Schedule consistent with Outline Schedule of Work for Trade Contractor’s Scope of Work and Trade Contractor’s Work shall reach Substantial Completion (See Article 1.1.55) The work shall be commenced on or before the date stated in the District's Notice to Proceed and shall be completed within **131 consecutive calendar days** beginning 5 days after receipt of the District's Notice of Award letter with **Substantial Completion being completed within 101 consecutive calendar days**. The Contractor hereby agrees to establish the date of official receipt of the District's Notice of Award letter to be _____. The Notice to Proceed shall not be issued prior to five calendar days after award of the contract, and shall not require that work be commenced less than five calendar days from the date of issuance of said notice. This shall be called Contract Time. (See Article 8.1.1). It is expressly understood that time is of the essence.

Trade Contractor has thoroughly studied the Project and has satisfied itself that the duration set forth for the Contract Time and the duration provided for Trade Contractor’s Scope of Work for this Project is adequate for the timely and proper completion of the Project within each milestone set forth in the Outline Schedule and within the Contract Time. Further, Trade Contractor has included in the analysis of the time required for this Project, items set forth in General Conditions Section 8.3.2.13, Submittal Schedules, Rain Day Float, and Governmental Delay Float.

ARTICLE 3 - LIQUIDATED DAMAGES: It being impracticable and infeasible to determine the amount of actual damage, it is agreed that the Trade Contractor will pay the District the sum of **TWO THOUSAND FIVE HUNDRED DOLLARS (\$2,500.00) per calendar day** for each and every day of delay attributable to Trade Contractor's critical path delay to the Project Baseline Schedule that delays Key Milestones for delivery of Phases or cause delay to the Contract Time set forth in Article 2 of this Agreement as Liquidated Damages and not as a penalty or forfeiture. In the event Liquidated Damages are not paid, the Trade Contractor further agrees that the District may deduct such amount thereof from any money due or that may become due Trade Contractor under the Contract (See Article 3.6 and 2.2 of the General Conditions). This Article shall not be construed as preventing the District from the recovery of damages (actual or other) under the Contract Documents.

ARTICLE 4 - CONTRACT PRICE: The District shall pay to the Trade Contractor as full consideration for the faithful performance of the Contract, subject to any additions or deductions as provided in the Contract Documents, the sum of _____ DOLLARS (\$_____), said sum being the total amount stipulated in the Bid Trade Contractor submitted. Payment shall be made as set forth in the General Conditions.

Should any Change Order result in an increase in the Contract Price, the cost of such Change Order shall be agreed to in advance by the Trade Contractor and the District, subject to the monetary limitations set forth in Public Contract Code Section 20118.4. In the event that the Trade Contractor proceeds with a Change in work without an agreement between the District and Trade Contractor regarding the cost of a Change Order, the Trade Contractor waives any Claim of additional compensation for such additional work.

ARTICLE 5 - HOLD HARMLESS AGREEMENT: Trade Contractor shall defend, indemnify and hold harmless District, Architect, Construction Manager, Inspector, the State of California and their officers, employees, agents and independent contractors from all liabilities, claims, actions, liens, judgments, demands, damages, losses, costs or expenses of any kind arising from death, personal injury, property damage or other cause based or asserted upon any act, omission, or breach connected with or arising from the progress of Work or performance of service under this Agreement or the Contract Documents. As part of this indemnity, Trade Contractor shall protect and defend, at its own expense, the District, Architect, Construction Manager, Inspector, the State of California and their officers, employees, agents and independent contractors from any legal action including attorney's fees or other proceeding based upon such act, omission, breach or as otherwise required by this Article.

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

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

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

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

Trade Contractor, at its own expense, cost, and risk, shall defend any and all claims, actions, suits, or other proceedings that may be brought or instituted against the District, its officers, agents or employees, on account of or founded upon any cause, damage, or injury identified herein Article 5 and shall pay or satisfy any judgment that may be rendered against the District, its officers, agents or employees in any action, suit or other proceedings as a result thereof.

ARTICLE 6 - PROVISIONS REQUIRED BY LAW: Each and every provision of law and clause required to be inserted in this Contract shall be deemed to be inserted herein, and this Contract shall be read and enforced as though it were included herein, and if through mistake or otherwise any such provision is not inserted or is not inserted correctly, then upon application of either party the Contract shall forthwith be physically amended to make such insertion or correction.

ARTICLE 7 - COMPONENT PARTS OF THE CONTRACT: The Contract entered into by this Agreement consists of the following Contract Documents, all of which are component parts of the Contract as if herein set out in full or attached hereto:

Project Manual (including multiple volumes if applicable) and everything contained therein
Project Construction Schedule
Addenda
Drawings
Specifications

All of the above named Contract Documents are intended to be complementary. Work required by one of the above named Contract Documents and not by others shall be done as if required by all.

ARTICLE 8 - PREVAILING WAGES: Wage rates for this Project shall be in accordance with the general prevailing rate of holiday and overtime work in the locality in which the work is to be performed for each craft, classification, or type of work needed to execute the Contract as determined by the Director of the Department of Industrial Relations. Copies of schedules of rates so determined by the Director of the Department of Industrial Relations are on file at the administrative office of the District and are also available from the Director of the Department of Industrial Relations.

The following are hereby referenced and made a part of this Agreement and Trade Contractor stipulates to the provisions contained therein.

1. Chapter 1 of Part 7 of Division 2 of the Labor Code (Section 1720 et seq.)
2. California Code of Regulations, Title 8, Chapter 8, Subchapters 3 through 6 (Section 16000 et seq.)

ARTICLE 9 - RECORD AUDIT: In accordance with Government Code Section 8546.7 (and Davis Bacon, if applicable) and Article 13.11 of the General Conditions, records of both the District and the Trade Contractor shall be subject to examination and audit for a period of five (5) years after a Final Retention Payment or the Recording of a Notice of Completion, whichever occurs first.

ARTICLE 10 - TRADE CONTRACTOR'S LICENSE: The Trade Contractor must possess throughout the Project a Class _____ Contractor's License, issued by the State of California, which must be current and in good standing.

ARTICLE 11 - EXECUTIVE ORDER N-6-22: SANCTIONS AGAINST RUSSIA - On March 4, 2022, Governor Gavin Newsom issued Executive Order N-6-22 (the EO) 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.

IN WITNESS WHEREOF, this Agreement has been duly executed by the above named parties, on the day and year first above written.

LITTLE LAKE CITY SCHOOL DISTRICT

TRADE CONTRACTOR:

By: _____

Typed or Printed Name

Title

Dated: _____

Signature

Type or Printed Name

Title (Authorized Officers or Agents)

Signature

(CORPORATE SEAL)

END OF DOCUMENT

ATTACHMENT NO. 1 TO AGREEMENT

Rules of Conduct for Contractors

Each contractor/or subcontractor, when performing work on **LITTLE LAKE CITY SCHOOL DISTRICT** property, shall adhere to the following rules of conduct

1. Professional and courteous conduct is expected and will be displayed at all times.
2. Interaction with students, staff, and/or other visitors is prohibited with the exception of designated administrators.
3. The use of profanity and/or disparaging language will not be tolerated.
4. All contractors and/or subcontractors shall wear a means of identification on site when school is in session which must be approved by the District prior to commencement of work. Approved identification shall be fluorescent shirts or safety vests with the company name/logo. Non-complying contractors and/or subcontractors will be removed from the site immediately.
5. All contractors and/or subcontractors:
 - a. Shall remain in the immediate vicinity of his/her work and will not stray to other areas of the property that do not involve their company's scope of work. All restroom facilities, including student and staff, are not to be used by the contractor. The contractor may be responsible for mobilizing to the construction site, their portable restroom.
 - b. Vehicles must be parked each day in the designated area prior to the start of the school day and removed after the end of the school day. If for some unforeseen reason a contractor and/or subcontractor vehicle needs to be removed during school hours, the vehicle shall have lights and flashers engaged, and a "spotter", provided by the contractor and/or subcontractor, leading the vehicle off District property. At no time will the vehicle exceed 5 mph.
6. Pursuant to Government Code, Section 8350 et. seq., the **LITTLE LAKE CITY SCHOOL DISTRICT** is a drug-free workplace. This policy shall be strictly enforced.
7. Alcoholic beverages are prohibited from being consumed or brought on any District property.
8. The use of any tobacco products on District property is strictly prohibited.
9. Any lewd, obscene or otherwise indecent acts, words, or behavior by any contractor and/or subcontractor shall not be tolerated.
10. All contractors and/or subcontractors shall conform to a dress code whereby:
 - a. No clothing that contains violent, suggestive derogatory, obscene, or racially biased material may be worn. This interpretation will be made by the District.
 - b. Garments, accessories or personal grooming artifacts with slogans, graphics, or pictures promoting drugs, alcohol, tobacco, or any other controlled substances which are prohibited to minors will not be allowed.
 - c. Tank top/mid-drift shirts and shorts of any kind are not allowed while on District property.
11. All contractors and/or subcontractors are responsible for their own means of communication including, but not limited to, telephone, cell phone, fax machine. At no time are the District communication systems to be used.

All contractors and/or subcontractors personal vehicles, as well as work vehicles and equipment, are the responsibility of the individual and/or company. Any damage that occurs to the vehicles and/or equipment while on District property is not the responsibility of the District and, therefore, any said claims for damages will not be acknowledged.

12. All contractors and/or subcontractors shall not allow employees to bring any food or drinks other than bottled water within 50 feet of buildings.
13. All contractors and/or subcontractors shall take all breaks and/or lunch in designated area as approved by the Construction Manager.

Non-compliance with any of the above-stated rules of conduct by any contractor/subcontractor may be sufficient grounds for immediate removal from the job site and termination of the contract.

I acknowledge that I am aware of the above-stated rules of conduct and hereby certify that all of my company's employees, consultants, suppliers, and/or any subcontractors will adhere to these provisions. I further acknowledge that any delays to the schedule perceived or otherwise, as a result of the District/designee removing my employee from the job site, are my company's responsibility.

Authorized Signature

Date

Print Name

Company

END OF DOCUMENT

ESCROW AGREEMENT FOR SECURITY DEPOSITS IN LIEU OF RETENTION

Form Based on Public Contract Code Section 22300

This Escrow Agreement ("Escrow Agreement") is made and entered into this _____ day of _____, 20____, by and between **LITTLE LAKE CITY SCHOOL DISTRICT**, whose address is **10515 S. PIONEER BLVD., SANTE FE SPRINGS, CA 90670** (henceforth referenced as "DISTRICT"); and _____ whose address is _____ (henceforth referenced as "CONTRACTOR"); and _____ whose address is _____ (henceforth referenced as "ESCROW AGENT").

For the consideration hereinafter set forth, DISTRICT, CONTRACTOR, and ESCROW AGENT agree as follows:

1. Pursuant to section 22300 of Public Contract Code of the State of California, which is hereby incorporated by reference, CONTRACTOR has the option to deposit securities with ESCROW AGENT as a substitute for retention earnings required to be withheld by DISTRICT pursuant to the Construction Contract No. _____ [Contract Number or Other Specific Contract Reference] entered into between DISTRICT and CONTRACTOR for the **STUDEBAKER ES – FLOORING & INTERIOR PAINTING**, in the amount of _____ dated, _____, 20____, (the "Contract"). Alternatively, on written request of CONTRACTOR, DISTRICT shall make payments of the retention earnings directly to ESCROW AGENT. When CONTRACTOR deposits the securities as a substitute for Contract earnings, ESCROW AGENT shall notify DISTRICT within ten (10) calendar days of the deposit. The market value of the securities at the time of substitution and at all times from substitution until the termination of the ESCROW AGREEMENT shall be at least equal to the cash amount then required to be withheld as retention under terms of Contract between DISTRICT and CONTRACTOR. Securities shall be held in name of the DISTRICT, and shall designate CONTRACTOR as beneficial owner.
2. DISTRICT shall make progress payments to CONTRACTOR for those funds which otherwise would be withheld from progress payments pursuant to Contract provisions, provided that ESCROW AGENT holds securities in form and amount specified above.
3. When DISTRICT makes payment of retention earned directly to ESCROW AGENT, ESCROW AGENT shall hold them for the benefit of CONTRACTOR until the time that the escrow created under this Escrow Agreement is terminated. CONTRACTOR may direct the investment of the payments into securities. All terms and conditions of this Escrow Agreement and the rights and responsibilities of the Parties shall be equally applicable and binding when the DISTRICT pays ESCROW AGENT directly.
4. CONTRACTOR shall be responsible for paying all fees for expenses incurred by ESCROW AGENT in administering the Escrow Account, and all expenses by DISTRICT. These expenses and payment terms shall be determined by DISTRICT, CONTRACTOR, and ESCROW AGENT.
5. Interest earned on securities or money market accounts held in escrow and all interest earned on that interest shall be for sole account of CONTRACTOR and shall be subject to withdrawal by CONTRACTOR at any time and from time to time without notice to DISTRICT.
6. Contractor shall have the right to withdraw all or any part of the principal in the Escrow Account only by written notice to ESCROW AGENT accompanied by written authorization from DISTRICT to ESCROW AGENT that DISTRICT consents to withdrawal of amount sought to be withdrawn by CONTRACTOR.

7. DISTRICT shall have the right to draw upon the securities in the event of default by CONTRACTOR as determined solely by DISTRICT. Upon seven (7) days written notice to ESCROW AGENT from DISTRICT of the default, ESCROW AGENT shall immediately convert the securities to cash and shall distribute the cash as instructed by DISTRICT.
8. Upon receipt of written notification from DISTRICT certifying that the Contract is final and complete, and the CONTRACTOR has complied with all requirements and procedures applicable to the Contract, ESCROW AGENT shall release to CONTRACTOR all securities and interest on deposit less escrow fees and charges of the Escrow Account. The escrow shall be closed immediately upon disbursement of all monies and securities on deposit and payments of fees and charges.
9. ESCROW AGENT shall rely on written notifications from DISTRICT and CONTRACTOR pursuant to Paragraphs 5 through 8, inclusive, of this Escrow Agreement and DISTRICT and CONTRACTOR shall hold ESCROW AGENT harmless from ESCROW AGENT's release and disbursement of securities and interest as set forth above.
10. Names of persons who are authorized to give written notice or receive written notice on behalf of DISTRICT and on behalf of CONTRACTOR in connection with the foregoing, and exemplars of their respective signatures are as follows:

On behalf of DISTRICT:

LITTLE LAKE CITY SCHOOL DISTRICT

Title

Name

Signature

Address

On behalf of CONTRACTOR:

Title

Name

Signature

Address

On behalf of ESCROW AGENT:

Title

Name

Signature

Address

At the time the Escrow Account is opened, DISTRICT and CONTRACTOR shall deliver to ESCROW AGENT a fully executed original signature of this Agreement.

IN WITNESS WHEREOF, the parties have executed this Agreement by their proper officers on the date first set forth above.

On behalf of DISTRICT:
LITTLE LAKE CITY SCHOOL DISTRICT

On behalf of CONTRACTOR:

Title

Name

Signature

Address

Title

Name

Signature

Address

On behalf of ESCROW AGENT:

Title

Name

Signature

Address

END OF DOCUMENT

PAYMENT BOND
(CALIFORNIA PUBLIC WORK)

KNOW ALL MEN BY THESE PRESENTS:

THAT WHEREAS, the **LITTLE LAKE CITY SCHOOL DISTRICT** (sometimes referred to hereinafter as “Obligee”) has awarded to _____ (hereinafter designated as the “Principal” or “Contractor”), an agreement for the work described as follows: **STUDEBAKER ES – FLOORING & INTERIOR PAINTING** (hereinafter referred to as the “Public Work”); and

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

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

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

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

It is further stipulated and agreed that the Surety of this bond shall not be exonerated or released from the obligation of the bond by any change, extension of time for performance, addition, alteration or modification in, to, or of any contract, Plans, or specifications, or agreement pertaining or relating to any scheme or work of improvement herein above described; or pertaining or relating to the furnishing of labor, materials, or equipment therefore; nor by any change or modification of any terms of payment or extension of time for payment pertaining or relating to any scheme or work of improvement herein above described; nor by any rescission or attempted rescission of the contract, agreement or bond; nor by any conditions precedent or subsequent in the bond attempting to limit the right of recovery of claimants otherwise entitled to recover under any such contract or agreement or under the bond; nor by any fraud

practiced by any person other than the claimant seeking to recover on the bond; and that this bond be construed most strongly against the Surety and in favor of all persons for whose benefit such bond is given; and under no circumstances shall the Surety be released from liability to those for whose benefit such bond has been given, by reason of any breach of contract between the Obligee and the Contractor or on the part of any Obligee named in such bond; that the sole condition of recovery shall be that the claimant is a person described in California Civil Code Section 9100, and who has not been paid the full amount of his or her claim; and that the Surety does hereby waive notice of any such change, extension of time, addition, alteration or modification herein mentioned.

IN WITNESS WHEREOF this instrument has been duly executed by the Principal and Surety above named, on the _____ day of _____, 20__.

PRINCIPAL/CONTRACTOR:

By: _____

SURETY:

By: _____

Attorney-in-Fact

IMPORTANT: THIS IS A REQUIRED FORM.

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

Any claims under this bond may be addressed to:

(Name and Address of Surety)

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

Telephone: _____

Telephone: _____

STATE OF CALIFORNIA)

) ss.

COUNTY OF)

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

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

WITNESS my hand and official seal.

Notary Public in and for said State

(SEAL)

Commission expires: _____

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

END OF DOCUMENT

PERFORMANCE BOND
(CALIFORNIA PUBLIC WORK)

KNOW ALL MEN BY THESE PRESENTS:

THAT WHEREAS, the **LITTLE LAKE CITY SCHOOL DISTRICT** (sometimes referred to hereinafter as "Obligee") has awarded to _____ (hereinafter designated as the "Principal" or "Contractor"), an agreement for the work described as follows: **STUDEBAKER ES – FLOORING & INTERIOR PAINTING** (hereinafter referred to as the "Public Work"); and

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

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

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

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

The Surety, for value received, hereby stipulates and agrees that it shall not be exonerated or released from the obligation of this bond (either by total exoneration or pro tanto) by any change, extension of time, alteration in or addition to the terms of the contract or to the work to be performed there under or the specifications accompanying the same, nor by any change or modification to any terms of payment or extension of time for any payment pertaining or relating to any scheme of work of improvement under the contract. Surety also stipulates and agrees that it shall not be exonerated or released from the obligation of this bond (either by total exoneration or pro tanto) by any overpayment or underpayment by the Obligee that is based upon estimates approved by the Architect. The Surety stipulates and agrees that none of the aforementioned changes, modifications, alterations, additions, extension of time or actions shall in any way affect its obligation on this bond, and it does hereby waive notice of any such changes, modifications, alterations, additions or extension of time to the terms of the contract, or to the work, or the specifications as well notice of any other actions that result in the foregoing.

Whenever Principal shall be, and is declared by the Obligee to be, in default under the Contract, the Surety shall promptly either remedy the default, or shall promptly take over and complete the Contract through its agents or independent contractors, subject to acceptance and approval of such agents or independent contractors by Obligee as hereinafter set forth, in accordance with its terms and conditions and to pay and perform all obligations of Principal under the Contract, including, without limitation, all obligations with respect to warranties, guarantees and the payment of Liquidated Damages; or, at Obligee's sole discretion and election, Surety shall obtain a bid or bids for completing the Contract in accordance with its terms and conditions, and upon determination by Obligee of the lowest responsible bidder, arrange for a contract between such bidder and the Obligee and make available as Work progresses (even though there should be a default or succession of defaults under the contract or contracts of completion arranged under this paragraph) sufficient funds to pay the cost of completion less the "balance of the Contract price" (as hereinafter defined), and to pay and perform all obligations of Principal under the Contract, including, without limitation, all obligations with respect to warranties, guarantees and the payment of Liquidated Damages. The term "balance of the Contract price," as used in this paragraph, shall mean the total amount payable to Principal by the Obligee under the Contract and any modifications thereto, less the amount previously paid by the Obligee to the Principal, less any withholdings by the Obligee allowed under the Contract. Obligee shall not be required or obligated to accept a tender of a completion contractor from the Surety.

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

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

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

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

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

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

PRINCIPAL/CONTRACTOR:

By: _____

SURETY:

By: _____

Attorney-in-Fact

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

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

IMPORTANT: THIS IS A REQUIRED FORM.

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

Any claims under this bond may be addressed to:
(Name and Address of Surety)

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

Telephone: _____

Telephone: _____

STATE OF CALIFORNIA)
) ss.
COUNTY OF)

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

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

WITNESS my hand and official seal.

Notary Public in and for said State

(SEAL)

Commission expires: _____

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

END OF DOCUMENT

GUARANTEE

We hereby guarantee that the _____, which we have installed for the **STUDEBAKER ES – FLOORING & INTERIOR PAINTING** project, has been performed in accordance with the requirements of the Contract Documents and that the work as installed will fulfill the requirements of the Contract Documents.

The undersigned agrees to repair or replace any or all of such work that may prove to be defective in workmanship or material together with any other adjacent work which may be displaced in connection with such replacement within a period of _____ year(s) from the date of acceptance of the above-mentioned project by the **LITTLE LAKE CITY SCHOOL DISTRICT**, ordinary wear and tear and unusual abuse or neglect excepted.

In the event of the undersigned's failure to comply with the above mentioned conditions within a reasonable period of time, as determined by the District, but not later than one week after being notified in writing by the District, the undersigned authorizes the District to proceed to have said defects repaired and made good at the expense of the undersigned, which will pay the costs and charges therefore upon demand.

Proper Name of Prime Contractor: _____

Signature of Authorized Person: _____

Print Name: _____ Title: _____

Name of Subcontractor (if applicable): _____

Subcontractor Signature (if applicable): _____

Prime Contractor's representatives to be contacted for service subject to terms of Contract.

NAME _____

ADDRESS _____

PHONE # _____

END OF DOCUMENT

CERTIFICATE REGARDING WORKERS' COMPENSATION FORM

Labor Code Section 3700 in relevant part provides:

Every employer except the State shall secure the payment of compensation in one or more of the following ways:

1. By being insured against liability to pay compensation by one or more insurers duly authorized to write compensation insurance in this State.
2. By securing from the Director of Industrial Relations a certificate of consent to self-insure, which may be given upon furnishing proof satisfactory to the Director of Industrial Relations of ability to self-insure and to pay any compensation that may become due to employees.
3. For any county, city, city and county, municipal corporation, public district, public agency, or any political subdivision of the state, including each member of a pooling arrangement under a joint exercise of powers agreement (but not the state itself), by securing from the Director of Industrial Relations a certificate of consent to self-insure against workers' compensation claims, which certificate may be given upon furnishing proof satisfactory to the director of ability to administer workers' compensation claims properly, and to pay workers' compensation claims that may become due to its employees. On or before March 31, 1979, a political subdivision of the state which, on December 31, 1978, was uninsured for its liability to pay compensation, shall file a properly completed and executed application for a certificate of consent to self-insure against workers' compensation claims. The certificate shall be issued and be subject to the provisions of Section 3702.

I am aware of the provisions of Labor Code Section 3700 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 I will comply with such provision before commencing the performance of the work of this Contract.

(Company)

(Signature)

(Print)

(Date)

In accordance with Article 5 (commencing at Section 1860), Chapter 1, Part 7, Division 2 of the Labor Code, the above certificate must be signed and submitted with the Trade Contractor's bid.

END OF DOCUMENT

CONTRACTOR'S CERTIFICATE REGARDING DRUG-FREE WORKPLACE

This Drug-Free Workplace Certification form is required from all successful bidders pursuant to the requirements mandated by Government Code Section 8350 et seq., the Drug-Free Workplace Act of 1990. The Drug-Free Workplace Act of 1990 requires that every person or organization awarded a contract or grant for the procurement of any property or service from any State agency must certify that it will provide a drug-free workplace by doing certain specified acts. In addition, the Act provides that each contract or grant awarded by a State agency may be subject to suspension of payments or termination of the contract or grant, and the contractor or grantee may be subject to debarment from future contracting, if the contracting agency determines that specified acts have occurred.

Pursuant to Government Code Section 8355, every person or organization awarded a contract or grant from a State agency shall certify that it will provide a drug-free workplace by doing all of the following:

- a) publishing a statement notifying employees that the unlawful manufacture, distribution, dispensation, possession or use of a controlled substance is prohibited in the person's or organization's workplace and specifying actions which will be taken against employees for violations of the prohibition;
- b) establishing a drug-free awareness program to inform employees about all of the following:
 - 1) the dangers of drug abuse in the workplace;
 - 2) the person's or organization's policy of maintaining a drug-free workplace;
 - 3) the availability of drug counseling, rehabilitation and employee-assistance programs;
 - 4) the penalties that may be imposed upon employees for drug abuse violations;
- c) requiring that each employee engaged in the performance of the contract or grant be given a copy of the statement required by subdivision (a) and that, as a condition of employment on the contract or grant, the employee agrees to abide by the terms of the statement.

I, the undersigned, agree to fulfill the terms and requirements of Government Code Section 8355 listed above and will publish a statement notifying employees concerning (a) the prohibition of controlled substance at the workplace, (b) establishing a drug-free awareness program, and requiring that each employee engaged in the performance of the contract be given a copy of the statement required by Section 8355 (a) and requiring that the employee agree to abide by the terms of that statement.

I also understand that if the DISTRICT determines that I have either (a) made a false certification herein, or (b) violated this certification by failing to carry out the requirements of Section 8355, that the contract awarded herein is subject to termination, suspension of payments, or both. I further understand that, should I violate the terms of the Drug-Free Workplace Act of 1990, I may be subject to debarment in accordance with the requirements of Section 8350 et seq.

I acknowledge that I am aware of the provisions of Government Code Section 8350 et seq. and hereby certify that I will adhere to the requirements of the Drug-Free Workplace Act of 1990.

Date: _____

Proper Name of Contractor: _____

Signature of Authorized Person: _____

Print Name: _____

Title: _____

END OF DOCUMENT

HAZARDOUS MATERIALS CERTIFICATION

Contract for category number _____ for the **STUDEBAKER ES – FLOORING & INTERIOR PAINTING** between **LITTLE LAKE CITY SCHOOL DISTRICT** ("District") and _____ ("Bidder").

1. Contractor hereby certifies that no Asbestos, or Asbestos-Containing Materials, polychlorinated biphenyl (PCB), or any material listed by the federal or state Environmental Protection Agency or federal and state health agencies as a hazardous material, or any other material defined as being hazardous under federal or state laws, rules, or regulations ("New Hazardous Material"), shall be furnished, installed, or incorporated in any way into the Project or in tools, devices, clothing, or equipment used to affect any portion of Contractor's work on the Project for District.
2. Contractor further certifies that it has instructed its employees with respect to the above mentioned standards, hazards, risks, and liabilities.
3. Asbestos and/or asbestos-containing material shall be defined as all items containing but not limited to chrysotile, crocidolite, amosite, anthophyllite, remolite, and actinolite. Any or all material containing greater than one-tenth of one percent (0.1%) asbestos shall be defined as asbestos-containing material.
4. Any disputes involving the question of whether or not material is New Hazardous Material shall be settled by electron microscopy or other appropriate and recognized testing procedure, at the District's determination. The costs of any such tests shall be paid by Contractor if the material is found to be New Hazardous Material.
5. All Work or materials found to be New Hazardous Material or Work or material installed with equipment containing "New Hazardous Material" will be immediately rejected and this Work will be removed at Contractor's expense at no additional cost to the District.
6. Contractor has read and understood the document Hazardous Materials Procedures & Requirements, and shall comply with all the provisions outlined therein.

Date: _____

Proper Name of Contractor: _____

Signature of authorized person: _____

Print Name: _____

Title: _____

END OF DOCUMENT

CERTIFICATION REGARDING BACKGROUND CHECKS

_____ certifies that it has performed one of the following:
[Name of Trade Contractor/Consultant]

- Pursuant to Education Code Section 45125.1, Trade Contractor has conducted criminal background checks, through the California Department of Justice, of all employees providing services to the **LITTLE LAKE CITY SCHOOL DISTRICT**, pursuant to the contract/purchase order dated _____, and that none have been convicted of serious or violent felonies, as specified in Penal Code Sections 1192.7(c) and 667.5(c), respectively.

As further required by Education Code Section 45125.1, attached hereto as Attachment "A" is a list of the names of the employees of the undersigned who may come in contact with pupils.

OR

- Pursuant to Education Code Section 45125.2, Trade Contractor will ensure the safety of pupils by one or more of the following methods:
 - 1. The installation of a physical barrier at the worksite to limit contact with pupils.
 - 2. Continual supervision and monitoring of all employees of the entity by an employee of the entity whom the Department of Justice has ascertained has not been convicted of a violent or serious felony.

I declare under penalty of perjury under the laws of the United States that the foregoing is true and correct.

Date _____, 20__

[Name of Trade Contractor/Consultant]

By its: _____

ATTACHMENT A:

CERTIFICATION REGARDING BACKGROUND CHECKS

(INSERT NAMES OF EMPLOYEES WHO MAY COME IN CONTACT WITH PUPILS)

**PREVAILING WAGE AND RELATED LABOR REQUIREMENTS
CERTIFICATION**

Contract for Category Number _____ for the **STUDEBAKER ES – FLOORING &
INTERIOR PAINTING** project between **LITTLE LAKE CITY SCHOOL DISTRICT** (“District”) and _____ (“Bidder”).

I hereby certify that I will conform to the State of California Public Works Contract requirements regarding prevailing wages, benefits, on-site audits with 48-hours notice, payroll records, and apprentice and trainee employment requirements, for all Work on the above Project including without limitation, the labor compliance program, if this Project is subject to a labor compliance program.

Date: _____

Proper Name of Contractor: _____

Signature of authorized person: _____

Print Name: _____

Title: _____

END OF DOCUMENT

**CERTIFICATE REGARDING ALCOHOLIC BEVERAGE AND TOBACCO-FREE
CAMPUS POLICY**

The Trade Contractor agrees that it will abide by and implement the District's Alcoholic Beverage and Tobacco-Free Campus Policy prohibits the use of alcoholic beverages, vaping and tobacco products, of any kind and at any time, on District-owned or leased buildings, on District property and in District vehicles.

I acknowledge that I am aware of the District's policy regarding alcoholic beverages, vaping and tobacco-free environments at District sites, including the Project site and hereby certify that I will adhere to the requirements of that policy and not permit any of my firm's employees, agents, subcontractors, or my firm's subcontractors' employees or agents to use tobacco and/or smoke on the Project site.

DATE: _____

Trade Contractor

By: _____
Signature

END OF DOCUMENT

LEAD-BASED MATERIALS CERTIFICATION

Contract for Category Number _____ for the **STUDEBAKER ES – FLOORING & INTERIOR PAINTING** between **LITTLE LAKE CITY SCHOOL DISTRICT** (“District”) and _____ (“Bidder”).

This certification provides notice to the Contractor that:

- (1) Contractor's work may disturb lead-containing building materials
- (2) Contractor shall notify the District if any work may result in the disturbance of lead-containing building materials.
- (3) Contractor shall comply with the Renovation, Repair and Painting Rule, if lead-based paint is disturbed in a six-square-foot or greater area indoors or a 20-square-foot or greater area outdoors.

1. LEAD AS A HEALTH HAZARD

Lead poisoning is recognized as a serious environmental health hazard facing children today. Even at low levels of exposure, much lower than previously believed, lead can impair the development of a child's central nervous system, causing learning disabilities, and leading to serious behavioral problems. Lead enters the environment as tiny lead particles and lead dust disburse when paint chips, chalks, peels, wears away over time, or is otherwise disturbed. Ingestion of lead dust is the most common pathway of childhood poisoning; lead dust gets on a child's hands and toys and then into a child's mouth through common hand-to-mouth activity. Exposures may result from construction or remodeling activities that disturb lead paint, from ordinary wear and tear of windows and doors, or from friction on other surfaces.

Ordinary construction and renovation or repainting activities carried out without lead-safe work practices can disturb lead-based paint and create significant hazards. Improper removal practices, such as dry scraping, sanding, or water blasting painted surfaces, are likely to generate high volumes of lead dust.

Because the Contractor and its employees will be providing services for the District, and because the Contractor's work may disturb lead-containing building materials, **CONTRACTOR IS HEREBY NOTIFIED** of the potential presence of lead-containing materials located within certain buildings utilized by the District. All school buildings built prior to 1978 are presumed to contain some lead-based paint until sampling proves otherwise.

2. OVERVIEW OF CALIFORNIA LAW

Education Code section 32240 et seq. is known as the Lead-Safe-Schools Protection act. Under this act, the Department of Health Services is to conduct a sample survey of schools in the State of

California for the purpose of developing risk factors to predict lead contamination in public schools (Ed Code, § 32241.)

Any school that undertakes any action to abate existing risk factors for lead is required to utilize trained and state-certified contractors, inspectors, and workers. (Ed.Code § 32243, subd. (b).) Moreover, lead-based paint, lead plumbing, and solders, or other potential sources of lead contamination, shall not be utilized in the construction of any new school facility or the modernization or renovation of any existing school facility. (Ed. Code, §32244.)

Any school that undertakes any action to abate existing risk factors for lead is required to utilize trained and state-certified contractors, inspectors, and workers. (Ed.Code, § 32243, subd. (b).) Moreover, lead-based paint, lead plumbing, and solders, or other potential sources of lead contamination, shall not be utilized in the construction of any new school facility or the modernization or renovation of any existing school facility. (Ed. Code, § 32244.)

Both the Federal Occupational Safety and Health Administration ("Fed/OSHA") and the California Division of Occupational Safety and Health ("Cal/OSHA") have implemented safety orders applicable to all construction work where a contractor's employee may be occupationally exposed to lead.

The OSHA Regulations apply to all construction work where a contractor's employee may be occupationally exposed to lead. The OSHA Regulations contain specific and detailed requirements imposed on contractors subject to that regulation. The OSHA Regulations define construction work as work for construction, alteration, and/or repair, including painting and decorating. It includes, but is not limited to, the following:

- a. Demolition or salvage of structures where lead or materials containing lead are present;
- b. Removal or encapsulation of materials containing lead;
- c. New construction, alteration, repair, or renovation of structures, substrates, or portions thereof, that contain lead, or materials containing lead;
- d. Installation of products containing lead;
- e. Lead contamination / emergency cleanup;
- f. Transportation, disposal, storage, or containment of lead or materials containing lead on the site or location at which construction activities are performed; and
- g. Maintenance operations associated with the construction activities described in the subsection.

Because it is assumed by the District that all painted surfaces (interior as well as exterior) within the District contain some level of lead, it is imperative that the Contractor, its workers and subcontractors fully and adequately comply with all applicable laws, rules and regulations governing lead-based materials (including Title 8, California Code of Regulations, section 1532.1).

Contractor shall notify the District if any Work may result in the disturbance of lead-containing building materials. Any and all Work that may result in the disturbance of lead-containing building materials shall be coordinated through the District. A signed copy of this Certification shall be on file prior to beginning Work on the Project, along with all current insurance certificates.

3. RENOVATION, REPAIR AND PAINTING RULE, SECTION 402(c)(3) OF THE TOXIC SUBSTANCES CONTROL ACT

The EPA requires lead safe work practices to reduce exposure to lead hazards created by renovation, repair and painting activities that disturb lead-based paint. Pursuant to the Renovation, Repair and Painting Rule (RRP), renovations in homes, childcare facilities, and schools built prior to 1978 must be conducted by certified renovation firms, using renovators with training by an EPA-accredited training provider, and fully and adequately complying with all applicable laws, rules and regulations governing lead-based materials, including those rules and regulations appearing within Title 40 of the Code of Federal Regulations as part 745 (40 CFR 745).

The RRP requirements apply to all contractors who disturb lead-based paint in a six-square-foot or greater area indoors or a 20-square-foot or greater outdoors. If a DPH-certified inspector or risk assessor determines that a home constructed before 1978 is lead-free, the federal certification is not required for anyone working on that particular building.

4. CONTRACTOR'S LIABILITY

If the Contractor fails to comply with any applicable laws, rules, regulations, and that failure results in a site or worker contamination, the Contractor will be held solely responsible for all costs involved in any required corrective actions, and shall defend, indemnify, and hold harmless the District, pursuant to the indemnification provisions of the Contract, for all damages and other claims arising there from,

If lead disturbance is anticipated in the Work, only persons with appropriate accreditation, registrations, licenses, and training shall conduct this Work.

It shall be the responsibility of the Contractor to properly dispose of any and all waste products, including, but not limited to, paint chips, any collected residue, or any other visual material that may occur from the prepping of any painted surface. It will be the responsibility of the Contractor to provide the proper disposal of any hazardous waste by a certified hazardous waste hauler. This company shall be registered with the Department of Transportation (DOT) and shall be able to issue a current manifest number upon transporting any hazardous material from any school site within the District.

The Contractor shall provide the District with any sample results prior to beginning Work, during the Work, and after the completion of the Work. The District may request to examine, prior to the commencement of the work, the lead training records of each employee of the Contractor.

THE CONTRACTOR HEREBY ACKNOWLEDGES, UNDER PENALTY OF PERJURY, THAT IT:

1. HAS RECEIVED NOTIFICATION OF POTENTIAL LEAD-BASED MATERIALS ON THE OWNER'S PROPERTY;
2. IS KNOWLEDGEABLE REGARDING AND WILL COMPLY WITH ALL APPLICABLE LAWS, RULES, AND REGULATIONS GOVERNING WORK WITH, AND DISPOSAL, OF LEAD.

THE UNDERSIGNED WARRANTS THAT HE/SHE HAS THE AUTHORITY TO SIGN ON BEHALF OF AND BIND THE CONTRACTOR. THE DISTRICT MAY REQUIRE PROOF OF SUCH AUTHORITY.

Date: _____

Proper Name of Contractor: _____

Signature of authorized person: _____

Print Name: _____

Title: _____

END OF DOCUMENT

IMPORTED MATERIALS CERTIFICATION

Contract for Category Number _____ for the **STUDEBAKER ES – FLOORING & INTERIOR PAINTING** between **LITTLE LAKE CITY SCHOOL DISTRICT** (“District”) and _____ (“Bidder”).

This form shall be executed by all entities that, in any way, provide or deliver and/or supply any soils, aggregate, or related materials ("Fill") to the Project Site. All Fill shall satisfy all requirements of any environmental review of the Project performed pursuant to the statutes and guidelines of the California Environmental Quality Act, section 21000 et seq. of the Public Resources Code ("CEQA"), and all requirements of section 17210 et seq. of the Education Code, including requirements for a Phase I environmental assessment acceptable to the State of California Department of Education and Department of Toxic Substances Control.

Certification of:

- Delivery Firm / Transporter
- Wholesaler
- Distributor
- Supplier
- Broker
- Other _____
- Manufacturer
- Retailer

Type of Entity:

- Corporation
- Limited Partnership
- Sole Partnership
- General Partnership
- Limited Liability Company
- Other _____

Name of firm (“Firm”): _____

Mailing Address: _____

Addresses of branch office used for this Project:

If subsidiary, name and address of parent company:

By my signature below, I hereby certify that I am aware of section 25260 of the Health and Safety Code and the sections referenced therein regarding the definition of hazardous material. I further certify on behalf of the Firm that all soils, aggregates, or related materials provided, delivered, and/or supplied or that will be provided, delivered, and/or supplied by this Firm to the Project Site are free of any and all hazardous material as defined in section 25260 of the Health and Safety Code. I further certify that I am authorized to make this certification on behalf of the Firm.

Date: _____

Proper Name of Contractor: _____

Signature of authorized person: _____

Print Name: _____

Title: _____

END OF DOCUMENT



LITTLE LAKE CITY SCHOOL DISTRICT
STUDEBAKER ES – FLOORING & INTERIOR PAINTING

Financial Reconciliation Letter – Category No. _____

Date:

Contractor Legally Responsible Person

Contractor Company Name

Contractor Address

Contractor Address

PROJECT: STUDEBAKER ES – FLOORING & INTERIOR PAINTING

SUBJECT: Final Reconciliation Letter – Category No. _____

Dear _____,

This closeout letter constitutes as a full and final compromise settlement of any and all known and unknown claims by the Contractor against the Owner (**Little Lake City School District**) and the **Little Lake City School District Studebaker ES – Flooring & Interior Painting**, including but not limited to, disputed, undisputed and doubtful claims. Payment of Owner of the amount agreed under this contract in the amount of \$Final Contract Amount shall constitute a full and complete accords and satisfaction of all such claims and shall constitute payment in full and a full release and discharge of owner, and their respective officers, directors, agents, sureties and employees from any and all further liability in connection with the subject project and contact. Contractor expressly waives any and all rights under California Civil Code Section 1542 which provides as follows: “A general release does not extend to claims which the creditor does not know or suspect to exist in his favor at the time of executing the release, which if known by him must have materially affected his settlement with the debtor.”

Once this document signed by Contractor Company Name (Category No. _____), it constitutes acceptance of the statements made above. Also, an official “Notice of Completion” will be brought to the Board of Education for approval and retention can be billed and then released thirty five (35) days following the recording of the “Notice of Completion”. Once disputes are reconciled and the form is signed, only then can the District file the “Notice of Completion” enabling the Contractor to bill for retention held. Also, in order for your firm to be issued the ensuing final retention payment, all items listed below in the “Items to be Completed” list must be complete and accepted by the Construction Manager and the District.



Little Lake City School District

By: _____
LLCSD Representative Printed Name

Signature: _____

Date : _____

Contractor Company Name

By: _____
Contractor Legally Responsible Printed Name

Signature: _____

Date: _____

ITEMS TO BE COMPLETED:

1. *Example: Consent of Surety*
2. *Example: Final Compliance of Certified Payroll Reports*
3. *Example: Completed DSA-6C Form*

Regards,

LLCSD Representative Name with Signature

HAZARDOUS MATERIALS PROCEDURES & REQUIREMENTS

1. Summary

This document includes information applicable to hazardous materials and hazard waste abatement.

2. Notice of Hazardous Waste or Materials Conditions

- a. Contractor shall give notice in writing to the District, the Construction Manager, and the Architect promptly, before any of the following conditions are disturbed, and in no event later than twenty-four (24) hours after first observance, of any:
 - (1) Material that Contractor believes may be material that is hazardous waste or hazardous material, as defined in section 25117 of the Health and Safety Code, that is required to be removed to a Class I, Class II, or Class III disposal site in accordance with provisions of existing law;
 - (2) Other material that may present a substantial danger to persons or property exposed thereto in connection with Work at the site.
- b. Contractor's written notice shall indicate whether the hazardous waste or material was shown or indicated in the Contract Documents to be within the scope of Work, and whether the materials were brought to the site by Contractor, its Subcontractors, suppliers, or anyone else for whom Contractor is responsible. As used in this section the term "hazardous materials" shall include, without limitation, asbestos, lead, Polychlorinated biphenyl (PCB), petroleum and related hydrocarbons, and radioactive material.
- c. In response to Contractor's written notice, the District shall investigate the identified conditions.
- d. If the District determines that conditions do not involve hazardous materials or that no change in terms of Contract is justified, the District shall so notify Contractor in writing, stating reasons. If the District and Contractor cannot agree on whether conditions justify an adjustment in Contract Price or Contract Time, or on the extent of any adjustment, Contractor shall proceed with the Work as directed by the District.
- e. If after receipt of notice from the District, Contractor does not agree to resume Work based on a reasonable belief it is unsafe, or does not agree to resume Work under special conditions, then District may order such portion of Work that is in connection with such hazardous condition or such affected area to be deleted from the Work, or performed by others, or District may invoke its rights to terminate the Contract in whole or in part. District will determine entitlement to or the amount or extent of an adjustment, if any, in Contract Price or Contract Time as a result of deleting such portion of Work, or performing the Work by others.
- f. If Contractor stops Work in connection with any hazardous condition and in any area affected thereby, Contractor shall immediately redeploy its workers, equipment, and materials, as necessary, to other portions of the Work to minimize delay and disruption.

3. Additional Warranties and Representations

- a. Contractor represents and warrants that it, its employees, and its subcontractors and their employees, shall at all times have the required levels of familiarity with the Site and the Work, training, and ability to comply fully with all applicable law and contract requirements for safe and expeditious performance of the Work, including whatever training is or may be required regarding the activities to be performed (including, but not limited to, all training required to address adequately the actual or potential dangers of Contract performance).
- b. Contractor represents and warrants that it, its employees, and its subcontractors and their employees, shall at all times have and maintain in good standing any and all certifications and licenses required by applicable federal, state, and other governmental and quasi-governmental requirements applicable to the Work.
- c. Contractor represents and warrants that it has studied carefully all requirements of the Specifications regarding procedures for demolition, hazardous waste abatement, or safety practices, specified in the Contract, and prior to submitting its bid, has either (a) verified to its satisfaction that the specified procedures are adequate and sufficient to achieve the results intended by the Contract Documents, or (b) by way of approved "or equal" request or request for clarification and written Addenda, secured changes to the specified procedures sufficient to achieve the results intended by the Contract Documents. Contractor accepts the risk that any specified procedure will result in a completed Project in full compliance with the Contract Documents.

4. Monitoring and Testing

- a. District reserves the right, in its sole discretion, to conduct air monitoring, earth monitoring, Work monitoring, and any other tests (in addition to testing required under the agreement or applicable law), to monitor Contract requirements of safe and statutorily compliant work methods and (where applicable) safe re-entry level air standards under state and federal law upon completion of the job, and compliance of the work with periodic and final inspection by public and quasi-public entities having jurisdiction.
- b. Contractor acknowledges that District has the right to perform, or cause to be performed, various activities and tests including, but not limited to, pre-abatement, during abatement, and post-abatement air monitoring, that District shall have no obligation to perform said activities and tests, and that a portion of said activities and tests may take place prior to the completion of the Work by Contractor. In the event District elects to perform these activities and tests, Contractor shall afford District ample access to the Site and all areas of the Work as may be necessary for the performance of these activities and tests. Contractor will include the potential impact of these activities or tests by District in the Contract Price and the Scheduled Completion Date.
- c. Notwithstanding District's rights granted by this paragraph, Contractor may retain its own industrial hygiene consultant at Contractor's own expense and may collect samples and may perform tests including, but not limited to, pre-abatement, during abatement, and post-abatement personal air monitoring, and District reserves the right to request documentation of all such activities and tests performed by Contractor relating to the Work and Contractor shall immediately provide that documentation upon request.

5. Compliance with Laws

- a. Contractor shall perform safe, expeditious, and orderly work in accordance with the best practices and the highest standards in the hazardous waste abatement, removal, and disposal industry, the applicable law, and the Contract Documents, including, but not limited to, all responsibilities relating to the preparation and return of waste shipment records, all

requirements of the law, delivering of all requisite notices, and obtaining all necessary governmental and quasi-governmental approvals.

- b. Contractor represents that it is familiar with and shall comply with all laws applicable to the Work or completed Work including, but not limited to, all federal, state, and local laws, statutes, standards, rules, regulations, and ordinances applicable to the Work relating to:
 - (1) The protection of the public health, welfare and environment;
 - (2) Storage, handling, or use of asbestos, PCB, lead, petroleum based products or other hazardous materials;
 - (3) The generation, processing, treatment, storage, transport, disposal, destruction, or other management of asbestos, PCB, lead, petroleum, or hazardous waste materials or other waste materials of any kind; and
 - (4) The protection of environmentally sensitive areas such as wetlands and coastal areas.

6. Disposal

- a. Contractor has the sole responsibility for determining current waste storage, handling, transportation, and disposal regulations for the job Site and for each waste disposal facility. Contractor must comply fully at its sole cost and expense with these regulations and any applicable law. District may, but is not obligated to, require submittals with this information for it to review consistent with the Contract Documents.
- b. Contractor shall develop and implement a system acceptable to District to track hazardous waste from the Site to disposal, including appropriate "Hazardous Waste Manifests" on the EPA form, so that District may track the volume of waste it put in each landfill and receive from each landfill a certificate of receipt.
- c. Contractor shall provide District with the name and address of each waste disposal facility prior to any disposal, and District shall have the express right to reject any proposed disposal facility. Contractor shall not use any disposal facility to which District has objected. Contractor shall document actual disposal or destruction of waste at a designated facility by completing a disposal certificate or certificate of destruction forwarding the original to the District.

7. Permits

- a. Before performing any of the Work and at such other times as may be required by applicable law, Contractor shall deliver all requisite notices and obtain the approval of all governmental and quasi-governmental authorities having jurisdiction over the Work.

Contractor shall submit evidence satisfactory to District that it and any disposal facility

- (1) have obtained all required permits, approvals, and the like in a timely manner both prior to commencement of the Work and thereafter as and when required by applicable law, and
- (2) are in compliance with all such permits, approvals and the regulations.

For example, before commencing any work in connection with the Work involving asbestos-containing materials, or PCBs, or other hazardous materials subject to regulation, Contractor agrees to provide the required notice of intent to renovate or demolish to the appropriate state or federal agency having jurisdiction, by certified mail, return receipt requested, or by some other method of transmittal for which a return receipt is obtained, and to send a copy of that notice to District. Contractor shall not conduct any Work involving asbestos-containing materials or PCBs unless Contractor has first confirmed that the appropriate agency having jurisdiction is in receipt of the required notification. All permits, licenses, and bonds that are required by governmental or quasi-governmental authorities, and all fees, deposits, tap fees, offsite easements, and asbestos and PCB disposal facilities expenses necessary for the prosecution of the Work, shall be procured and paid for by Contractor. Contractor shall give all notices and comply with the all applicable laws bearing on the conduct of the Work as drawn and specified. If Contractor observes or reasonably should have observed that Plans and Specifications and other Contract Documents are at variance therewith, it shall be responsible for promptly notifying District in writing of such fact. If Contractor performs any Work contrary to applicable laws, it shall bear all costs arising there from.

- b. In the case of any permits or notices held in District's name or of necessity to be made in District's name, District shall cooperate with Contractor in securing the permit or giving the notice, but the Contractor shall prepare for District review and execution upon approval, all necessary applications, notices, and other materials.

8. Indemnification

To the extent permitted by law, the indemnities and limitations of liability expressed throughout the Contract Documents apply with equal force and effect to any claims or liabilities imposed or existing by virtue of the removal, abatement, and disposal of hazardous waste. This includes, but is not limited to, liabilities connected to the selection and use of a waste disposal facility, a waste transporter, personal injury, property damage, loss of use of property, damage to the environment or natural resources, or “disposal” and “release” of materials associated with the Work (as defined in 42 U.S.C. § 9601 et seq.).

9. Termination

District shall have an absolute right to terminate for default immediately without notice and without an opportunity to cure should Contractor knowingly or recklessly commit a material breach of the terms of the Contract Documents, or any applicable law, on any matter involving the exposure of persons or property to hazardous waste. However, if the breach of contract exposing persons or property to hazardous waste is due solely to an ordinary, unintentional, and non-reckless failure to exercise reasonable care, then the procedures for termination for cause shall apply without modification.

END OF SECTION

SECTION 00 06 72

PUBLIC WORKS AFFIDAVIT
California Labor Code Section 1775(b)(4)

The undersigned Contractor/Subcontractor has complied with the provisions of the California Labor Code Sections 1771, 1773.1, 1775, 1776, 1777.5, 1813 and 1815, and has paid all employees the specified general prevailing rate of per diem wages to its employees, and any amounts due pursuant to Section 1813, on the public project:

Project Name: **STUDEBAKER ES – FLOORING & INTERIOR PAINTING**

Add for DIR/CMU Projects: I further certify that all certified payroll (#1 through Final, and any Supplemental CPR) has been uploaded to the DIR/CMU website.

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

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

CONTRACTOR: _____

SIGNATURE: _____

PRINT NAME: _____

TITLE: _____

END OF DOCUMENT

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ARTICLE 1 DEFINITIONS

1.1 BASIC DEFINITIONS

NOTE: The following shall not be construed as a comprehensive list of all definitions in the Contract Documents and there may be other definitions set forth in the Contract Documents. Additionally, any references to any DSA forms, documents or requirements shall be construed to incorporate any updates, supplements, or additions. The Contractor shall be required to meet the latest DSA requirements applicable to the Project.

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

1.1.2 Act of God is defined as only including earthquakes in excess of 3.5 on the Richter Scale and Tidal waves as defined under Public Contract Code Section 7105.

1.1.3 Approval means written authorization through action of the Governing Board. The Governing board has delegated to the Assistant Superintendent the authority to approve certain modifications, Change Orders or Immediate Change Directives (Subject to the limits of the Delegation of Authority provided by the Board). In no case shall the Assistant Superintendent have authority to approve total Change Orders or Modifications to the Project exceeding 10% of the Contract Sum.

1.1.4 Architect means the architect, engineer, or other design professional engaged by the District to design and perform general observation of the Work of construction and interpret the Drawings, Specifications, Addenda and other Contract Documents for the Project. (See Article 4)

1.1.5 As-Builts are a set of Plans and Specifications maintained by the Trade Contractor clearly showing all changes, revisions, substitutions, field changes, final locations, and other significant features of the Project. The As-Builts shall be maintained continuously throughout the Work for the Project and is both a prerequisite to the issuance of Payment Application and a requirement for Contract Close-Out. (See Article 3.18)

1.1.6 Beneficial Occupancy is the point in time when a building or buildings are fit for occupancy is fit for occupancy and its intended use. Basic requirements are the building is safe, at or near Substantial Completion, and all fire/ life safety items are approved and operational. The fact that a building is occupied does not mean that the building is ready for Beneficial Occupancy if there are elements that are unsafe or if fire/ life safety items are not approved and operational. Taking occupancy on a structure that is under a fire watch is not considered Beneficial Occupancy. Further, taking of Beneficial Occupancy is not a point in time when retention is due unless the entire school has obtained a Certificate of Substantial Completion that meets the definition of 1.1.55.

1.1.6.1 Trade Contractors shall not treat Beneficial Occupancy as completion or Substantial Completion. Substantial Completion is only reached based on 1.1.55. Completion for Final Payment and Retention Payment are further addressed in Article 9.

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1.1.7 BIM stands for Building Information Modeling, which is an electronic modeling system that may be used to design, model and coordinate the Work of the Trade Contractors for the Project.

1.1.8 [NOT USED.]

1.1.9 Change Order (CO). A CO is a written instrument prepared by the Architect and signed by the District (as authorized by the District's Governing Board), the Trade Contractor, and the Architect, stating their agreement upon (1) A description of a change in the Work, (2) The amount of the adjustment in the Contract Sum, if any; and (3) The extent of the adjustment in the Contract Time, if any. (See Article 7.2)

1.1.10 Change Order Request (COR). A COR is a written request supported by backup documentation prepared by the Trade Contractor requesting that the District and the Architect issue a CO based upon a proposed change, or a change that results in an adjustment in cost, time or both, or arising from an RFP, CCD or ICD. (See Article 7.6)

1.1.11 Claims. A Claim is a request for payment, supported by back-up documentation which includes, invoices time sheets, or other documents substantiating legitimacy or entitlement that is submitted during the Project or immediately following the Project made prior to the Final Retention Payment Application and prior to Final Completion of the Project. A "Claim" means a separate demand by the Trade Contractor for (1) time extension, (2) payment of money or damages arising from Work done by or on behalf of the Trade Contractor pursuant to the Contract and payment of which is not otherwise expressly provided for or the claimant is not otherwise entitled to, or (3) and amount the payment of which is disputed by the District. (See Article 4.6)

1.1.12 Clash or Coordination Check is a Construction Manager generated report utilizing the BIM program and a process utilized by Construction Manager to address inconsistencies, areas for coordination, and identification of Trade Contractor Work that may need to be redirected, moved, or resequenced. CM may not use the entire Clash Check Report. They may select certain areas or items to review during Initial Trade Contractor Coordination Meetings. This coordination or resequencing is undertaken as part of the Project Baseline Schedule process and is primarily conducted during the early part of the Contract prior to the actual start of construction at Initial Trade Contractor Coordination meetings.

1.1.13 Close-Out means the process for Final Completion of the Project, but also includes the requirements for the DSA Certification that the Project is Complete (See DSA Certification Guide). (See Article 9.9)

1.1.14 Construction Change Document (CCD). A Construction Change Document is a DSA term that is utilized to address changes to the DSA approved Plans and Specifications. There are two types of Construction Change Documents. (1) DSA approved CCD Category A for work affecting structural, access or fire/ life safety of the Project which will require a DSA approval; and, (2) CCD Category B for work NOT affecting structural safety, access compliance or fire/ life safety that will not require a DSA approval (except to confirm that no approval is required). Both CCD Category A and Category B shall be set forth in DSA Form 140 and submitted to DSA as required. (See Article 7.3)

1.1.15 Complete/ Completion/ Final Completion means that all Work in the Contract Documents is finished, the requirements of the Contract Documents have been met, the Project has been Closed Out, and all Work has ceased on the Project. This may also be referred to as Final Completion. In

GENERAL CONDITIONS

most cases, the recording of a Notice of Completion shall represent Completion of the Project. Beneficial Occupancy does not mean the Work is Complete.

1.1.16 Completion Date is the date when all Work for the Project shall be Substantially Complete and is the date assigned at the end of the Contract Time for the Project. (See Article 1.1.55)

1.1.17 Construction Manager (CM). The Construction Manager is a consultant to the District contracted to perform Project planning, scheduling, coordination, and management of the construction of the Project. The CM shall coordinate and revise Trade Contractor Baseline Schedules and prepare an overall Project Baseline Schedule that meets all Milestones and results in completion of the Project within the Contract Time. CM shall also monitoring the progress of the construction, review, monitor, and enforce the schedule, oversee the progress of Work, monitoring pay requests, facilitate communications with Trade Contractors and the Design Team, advise the District and its Board of Education on various aspects of the construction process, monitor the RFI, COR, CCD, ICD, RFP, Claims, Disputes and other Project related processes.

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

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

1.1.20 Contract Time is the time period specified in the Contract Documents in which the Project shall be completed. This is sometimes referred to a Contract Duration, or "time in which the Trade Contractor has to complete the Project". (See Article 8.1.1)

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

1.1.22 Cure is the act of remedying a material failure to perform under the terms of the Contract Documents during the time provided to correct Trade Contractor's Default. Specific time periods are provided to Cure and Correct a Trade Contractor Default under Article 14 and for a Partial Default under Article 2.2 as well as elsewhere in the Contract Documents.

1.1.23 Days mean calendar days unless otherwise specifically stated.

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1.1.24 Default is a material breach of Contract. A Termination for Cause under Article 14 is a declaration of Default of the Contract and shall act as a demand upon the Surety to perform under the terms of the Performance Bond. Partial Defaults may also be tendered to the Surety at District's discretion. (See Article 2.2)

1.1.25 Design Team is the Architect, Engineers, and the CM. Although the CM is part of the Design Team, the CM shall not be construed as the Architect or Design Professional.

1.1.26 Dispute is a disagreement on terms or conditions of the Project where the Trade Contractor's opinion of the Project, Payment, Change Order or Request for Proposal differs from that of the District or Architect. A Dispute only rises to the level of a Claim once the Dispute is assembled with back-up documentation and presented for evaluation. (See Article 4.6)

1.1.27 District Representative is the person designated by the District to represent the District during the Construction for the Project. This District Representative may have the delegated authority as further defined in Article 1.1.3. This District Representative may be an employee of the District, and may also include CMs who shall have the authorities as set forth in Article 1.1.3. The CM is responsible to work with Trade Contractors and coordinate Baseline Schedules, Update Schedules, and work with Trade Contractors to deliver a complete Project within the Contract Time. When a CM is assisting the District, the Trade Contractor, Architect, and Inspector shall have a primary contact with the District's CM who will advise the District.

1.1.28 Drawings/Plans are graphic and pictorial portions of the Contract Documents prepared for the Project and approved changes thereto, wherever located and whenever issued, showing the design, location, and scope of the Work, generally including plans, elevations, sections, details, schedules, and diagrams as drawn or approved by the Architect. Sometimes Drawings will also be included in Addenda, Change Orders, and Specifications.

1.1.29 DSA is the Division of State Architect. DSA is the agency that provides design and construction oversight for K-12 Schools, Community Colleges, and State Funded Charter School Projects. DSA is the responsible agency for this Project and Trade Contractor has submitted a bid for the Project since Trade Contractor is familiar with Trade Contractor's responsibilities under the DSA requirements more thoroughly set forth at Title 24 of the California Code of Regulations. Trade Contractor agrees to abide by the jurisdiction of DSA and shall construct the Project to conform with the approved Plans, Specifications, Addenda, and Change Orders (inclusive of approved CCD's and ICD's issued by the District pending CCD approval). See DSA website at <http://www.dgs.ca.gov/dsa>.

1.1.30 Emergency shall be defined as a sudden, unexpected occurrence, involving a clear and imminent threat to the continuation of school classes, a critical path delay that will result in not being able to occupy the school when students arrive to use the facility, danger from the facility or from outside the facility, Act of God, or other action which requires immediate action to prevent or mitigate loss of, or damage to, life, health, property, or essential public services.

1.1.31 Float the total number of days an activity may be extended or delayed without delaying the Completion Date shown in the schedule. Float will fall into three categories: (1) Rain Days; (2) Governmental Delays; and, (3) Project Float. (See Article 8.1.5)

1.1.32 [NOT USED.]

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1.1.33 Immediate Change Directive (ICD) is a written order prepared by the Architect and signed by the District and the Architect, directing a change in the Work where the Work must proceed immediately and stating a proposed basis for adjustment, if any, in the Contract Sum or Contract Time, or both. (See Article 7.3)

1.1.34 Initial Trade Contractor Coordination Meetings. There shall be a series of Initial Coordination Meetings to establish protocols, Trade Contractor Coordination Requirements, Trade Contractor Baseline Durations, and to undertake BIM Clash Check Detection and Conflict Resolution Analysis and resolution. Participation in all Initial Coordination Meetings is mandatory.

1.1.35 Inspector of Record (IOR)/ Project Inspector (PI)/ Inspector is the individual retained by the District in accordance with Title 24 of the California Code of Regulations and who will be assigned to the Project

1.1.36 Notice of Non-Compliance (DSA Form 154) is a document issued by the Inspector if there is a deviation from the DSA approved Plans, Specifications, and Change Orders. (See Article 7.1.2)

1.1.37 Notice to Proceed (NTP) is a written notice provided by the District after bids are awarded and contractually required paperwork and submissions are completed noticing Trade Contractors that Work may proceed. The NTP represents the formal commencement of Work.

1.1.38 Outline Schedule is a general representation of the Schedule for the Work of the Project utilized to illustrate anticipated Trade Contractor durations, Phasing, Milestones, and the anticipated general sequencing necessary to complete the Project within the Contract Time.

1.1.39 Payment Application or Certificate of Payment is the Trade Contractor's certified representation of the actual level of Work performed on the Project. Payment Applications are sometimes also called "Certificate of Payment", "Request for Payment", "Payment Application", or similar terms and shall follow the Schedule of Values that are approved by the Architect, Inspector and District. See Article 9.3.

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

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

1.1.42 Provide shall include "provide complete in place," that is "furnish and install complete."

1.1.43 Punch List/ Punch Item/ Incomplete Punch Item is a list of minor repair items, prepared after the issuance of a Certificate of Substantial Completion, by the Inspector and Architect of Work required in order to complete the Contract Documents and ensure compliance with the DSA Approved Plans so the Project may be Closed Out. Issuance of the Retention Payment is dependent of the proper completion of the Punch List. (See Article 9.9)

1.1.43.1 *Trade Contractor's List of Punch Items* is a list of minor repair items the Trade Contractor submits when the Trade Contractor considers the Work Substantially Complete. Submission of this List of Incomplete Punch Items is the Trade Contractor's representation that the Project is Substantially Complete. (See Article 9.9.1)

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1.1.44 Request for Information (RFI) is a written request prepared by the Trade Contractor requesting the Architect to provide additional information necessary to clarify or amplify an item which the Trade Contractor believes is not clearly shown or called for in the Drawings or Specifications, or to address problems which have arisen under field conditions. (See Article 7.4)

1.1.45 Request for Proposal (RFP) is a written request prepared by the Architect (and/or CM) requesting the Trade Contractor to submit to an estimate of the effect of a proposed change on the Contract Price and (if applicable) the Contract Time. (See Article 7.5)

1.1.46 Safety Orders are those issued by any city, county, state or federal agency having jurisdiction over the Project.

1.1.47 Schedule is the Trade Contractor's view of the practical way in which the Work will be accomplished within the Contract Time based on the Outline Schedule provided in the Contract Documents. In this Agreement, the Trade Contractor will prepare and provide a Trade Contractor Baseline Schedule to address Milestones and timing of the Work of Trade Contractor based on the Outline Schedule provided in the Contract Documents. This Trade Contractor Baseline Schedule will be evaluated by CM and incorporated into a Project Baseline Schedule which governs the Trade Contractor's Work to be completed during the Contract Time and shall include all items listed under Article 8.3.2.12. See Article 8 of the General Conditions.

1.1.48 Schedule of Values is a detailed breakdown of the Contract Price for each Project, building, Phase of Work or Site as determined by the District. This Schedule of Values shall adequately detail the price for the Work so Progress Payments Applications can be meaningfully reviewed by the Inspector, Architect of Record, Engineer of Record, and District. (See Article 9.2.2)

1.1.49 Separate Contracts are Contracts that the District may have with other Contractors, vendors, suppliers, or entities to perform Work on the Project. This may include, but is not limited to Multi-Prime Trade Contractors, furniture installers, testing agencies, clean-up contractors, or network or low voltage contractors. Trade Contractor shall plan for certain other contractors that may also be working on the Project site and address these other contractors in Trade Contractor's Schedule. (See Article 6)

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

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

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

1.1.53 Stop Work Order, or an Order to Comply, is issued when either (1) the Work proceeds without DSA approval; (2) the Work proceeds without a DSA Inspector of Record, or (3) where DSA determines that the Work is not being performed in accordance with applicable rules and regulations, and would compromise the structural integrity of the Project or would endanger lives. If a Stop Work Order is issued, the Work in the affected area shall cease until DSA withdraws the Stop Work Order. Pursuant to Education Code Section 17307.5(b) and Education Code Section 81133.5, the District shall not be held

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liable in any action filed against the District for any delays caused by compliance with the Stop Work Order

1.1.54 Subcontractor, as used herein, includes those having direct or indirect contracts with Trade Contractor and ones who furnished labor, material or services for a special design according to Plans, Drawings, and Specifications of this Work.

1.1.55 Substantial Completion/ Substantially Complete(d) is not reached unless and until each of the following four (4) conditions have been met: (1) all contractually required items have been installed with the exception of only minor and Incomplete Punch List Items (See Article 9.9.1.2); (2) All Fire/Life Safety Systems have been installed, and are working and signed off on the DSA Form 152 Inspection Card, and all building systems including mechanical, electrical and plumbing are all functioning; (3) all other items DSA Form 152 Inspection Card for the Project have been approved and signed off; and (4) the Project is fit for occupancy and its intended use. For the purposes of this Contract, any references to Completion Dates mean Substantial Completion Date.

1.1.56 Substitution is a change in product, material, equipment, or method of construction from those required by the Construction Documents proposed by the Trade Contractor. For this Project, a Substitution is subject to the filing of a Construction Substitution Request Form at the time of bid and meeting the requirements of Article 3.10.

1.1.57 Supplementary Conditions/ Supplementary General Conditions/ Special Conditions are terms that are sometimes used interchangeably and refer to any additional requirements or changes to the General Conditions or other documents as noted.

1.1.58 Surety is the person, firm, or corporation that executes as a bid bond, Payment bond or Performance Bond guarantor on the Trade Contractor's Bid, Trade Contractor's Performance on the Contract and Payment of the Trade Contractor's Subcontractors, material suppliers, vendors and labor on the Project. The Surety is bound to the same extent as the Trade Contractor is bound once a Default occurs. A default includes a Termination for Substantial Failure to Perform under Article 14, but also includes any breach of Contract and is subject to the requirements and responsibilities as set forth in the Performance Bond.

1.1.59 Trade Contractor is one of the multiple prime Trade Contractors that perform work under the direction of a CM. The Trade Contractors as a whole perform various segments of the Work so the entire Work of the Project may be completed. Each Trade Contractors Work is dependent on other Trade Contractor's Work and shall be assembled as a whole so the Project may be delivered ad a complete operational Project fit for occupancy, and utilized for its intended purpose and so the Project may be completed in the Contract Time.

1.1.60 [NOT USED.]

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

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become familiar with the Drawings, Specifications, and associated Contract Documents and bid documents before preparing and submitting any bid.

1.1.62 Workers include laborers, workers, and mechanics.

1.2 EXECUTION, CORRELATION AND INTENT

1.2.1 Correlation and Intent

1.2.1.1 *Documents Complementary and Inclusive.* The Contract Documents are complementary and are intended to include all items required for the proper execution and completion of the Work. All Contract Documents identified in Trade Contractor Scope of Work and related to or required to provide a completed assembly or Project assembly form the Trade Contractor's Contract with the District. Trade Contract Work includes any item of Work mentioned or referenced in the Specifications and not shown on the Drawings, or shown on the Drawings and not mentioned in the Specifications, shall be provided by Trade Contractor as if shown or mentioned in both. Trade Contractor is bound to provide the Work complete and is under a legal duty to carefully study Plans and schedule operations well ahead of time and identify inconsistencies with the Plans and Specifications and call such inconsistencies to the attention of the Architect or Registered Engineer through the Inspector under Section 4-343(b) of Title 24.

1.2.1.2 *Work to be Complete.* Trade Contractor has thoroughly studied the Contract Documents and understands that the District contracted with Trade Contractor to provide a complete Scope of Work for the Project which means complete systems and buildings. The entire set of Contract Documents shows a complete Project and Trade Contractor agrees that there are multiple disciplines putting together a set of Contract Documents. Thus, if portions of a system are shown on some Drawings and not others, this does not mean the Trade Contractor is to only provide part of a system. For example, if an air conditioning unit is shown on the mechanical Drawings, the plumbing for the air conditioning is shown on another Drawing, and the electrical shown on the electrical Drawings, the Trade Contractor is to provide a complete and working air conditioning system unless specifically noted otherwise on Scope of Work. If there are any questions, Trade Contractor is to submit a RFI on the prescribed RFI form before excluding any item from its bid, and a response will be provided and included as an Addendum. Failure to request clarification shall be conclusive that Trade Contractor intended to provide a complete system or assembly. The only time when an item is supplied incomplete is if the system is shown specifically as incomplete since others will be completing the system. Work includes, but is not limited to materials, workmanship, and manufacture of fabrication of components for the Project.

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

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

1.2.1.5 *Conformance with Laws.* Each and every provision of law required by law to be inserted in this Contract shall be deemed to be inserted herein, and the Contract shall be read and enforced as though it were included herein, even if through mistake or otherwise any such provision is not inserted, or is not correctly inserted. Any references to codes, statutes, regulations, governmental forms or documents including documents issued by DSA shall include any subsequent revisions or updates thereto.

Before commencing any portion of the Work, Trade Contractor shall check and review the Drawings and Specifications for such portion for conformance and compliance with all laws, ordinances, codes, rules and regulations of all governmental authorities and public and municipal utilities affecting the construction and operation of the physical plant of the Project, all quasi-governmental and other regulations affecting the construction and operation of the physical plant of the Project, and other special requirements, if any, designated in the Contract Documents. Such checking shall include review of Title 24 of the California Code of Regulations, California Building Code, local utility, local water connection, local grading and all other applicable agencies. In the event Trade Contractor observes any violation of any law, ordinance, code, rule or regulation, or inconsistency with the Contract Documents, Trade Contractor shall, within five (5) days, notify the Inspector, Architect and District in writing of same and shall ensure that any such violation or inconsistency shall be corrected in the manner provided hereunder prior to the construction of that portion of the Project. (See Title 24 Section 4-343)

The Trade Contractor shall bear all expenses of correcting Work done contrary to said laws, ordinances, rules, and regulations if the Trade Contractor performed same (1) without first consulting the Architect for further instructions regarding said Work or (2) disregarded the Architect's instructions regarding said Work.

1.2.1.6 *Ambiguity and Inconsistency.* Before commencing any portion of the Work, Trade Contractor shall carefully examine all Drawings and Specifications and other information given to Trade Contractor as to materials and methods of construction and other Project requirements. Prior to commencing any portion of the Work, Trade Contractor shall notify Architect and District in writing of any perceived or alleged error, inconsistency, conflict, ambiguity, or lack of detail or explanation in the Drawings and Specifications in the manner provided herein. If the Trade Contractor or its Subcontractors, material or equipment suppliers, or any of their officers, agents, and employees performs, permits, or causes the performance of any Work under the Contract Documents, which it knows or should have known to be in error, inconsistent, or ambiguous, or not sufficiently detailed or explained, Trade Contractor shall bear any and all costs arising therefrom including, without limitation, the cost of correction thereof without increase or adjustment to the Contract Price or the time for performance. Trade Contractor shall maintain an adequate inspection system and perform personal observations and review work and pre-plan the Project to ensure the Work performed under the Contract conforms to Contract requirements. Trade Contractor shall maintain records of such review and observation to ensure strict compliance with the terms of the Contract.

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

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

1.2.2 Addenda and Deferred Approvals

1.2.2.1 *Addenda* are the changes in Specifications, Drawings, Contract Documents, and Plans which have been authorized in writing by the District or Architect, and which alter, explain, or clarify the Contract Documents. Addenda shall govern over all other Contract Documents. Subsequent addenda issued shall govern over prior addenda unless otherwise specified in the addenda.

1.2.2.2 *Deferred Approvals.* Deferred Approvals are Submittals that are reviewed by the Architect (or Engineer of Record) and submitted to DSA for approval based on thorough detailing of manufacturer and Project specific design. (See Article 3.9.1 and 3.9.3) The Deferred Approval item cannot be fully detailed on the originally approved Drawings or Specifications because of variations in product design and manufacture. Contract Documents which require Deferred Approval items are meant to be for illustration purposes only. Approval of Plans for such a portion of the Work may be deferred until the material suppliers and Subcontractors are selected. All Deferred Approvals are noted in the Plans and Specifications. Trade Contractor is responsible for all Deferred Approval requirements set forth in the Contract Documents. Trade Contractor is responsible to comply with all laws, building codes, Title 24 and regulations necessary to obtain all necessary approvals, including those required from the Division of the State Architect ("DSA") and the State Fire Marshall. Trade Contractor shall not be granted an extension of time for failure to plan, schedule for and obtain necessary approvals. Trade Contractor shall Schedule all Deferred Approval items in the Project Baseline Schedule and Schedule Updates under Article 3.9.6 and 8.3.2

1.2.3 Specification Interpretation

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

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

1.2.3.3 *General Conditions.* The General Conditions and Supplementary General Conditions are a part of the Contract Documents which further defines and refines the Contract entered between the Trade Contractor and District.

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

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

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

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

1.2.4 Rules of Document Interpretation

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

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

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

1.2.4.3 If Trade Contractor observes that Drawings and Specifications are in conflict, Trade Contractor shall, prior to commencing work, notify the Architect in writing for the purposes of obtaining an interpretation of the Contact Documents.

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

- a. General Conditions take precedence over Drawings and Specifications.
- b. Supplemental Conditions take precedence over General Conditions.

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- c. The Agreement Form shall take precedence over the Supplemental Conditions.
- d. In the case of disagreement or conflict between or within Specifications, and Drawings, the more stringent, higher quality, and greater quantity of Work shall apply.
- e. Addenda shall take precedence over Drawings and Specifications.
- f. General Conditions shall take precedence over Addenda.
- g. Drawings and Specifications take precedence over the Soils Report.

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

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

ARTICLE 2 DISTRICT

2.1 INFORMATION AND SERVICES REQUIRED OF THE DISTRICT

2.1.1 Site Survey

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

2.1.2 Soils

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

2.1.3 Soil Report part of the Contract Documents: Trade Contractor Reliance

A soils investigation report has been obtained from test holes at the Site, and such report is incorporated into this Contract and made available for the Trade Contractor's use in preparing its bid and Work under this Contract. Where the Plans and Specifications are more specific and provide more significant structure, systems, reinforcing, thicknesses, or construction methods, the Drawings shall control over the soils report. The soils report is available at the Architect's office for review and it is Trade Contractor's responsibility to ensure that Trade Contractor has reviewed the soils investigation report. Any information obtained from such report or any other information given on Drawings as to subsurface soil condition or to elevations of existing grades or elevations of underlying rock is approximate only. If, during the course of Work under this Contract, Trade Contractor encounters subsurface conditions which differ materially from those indicated in the soils report, then Trade Contractor shall notify the District within five (5) calendar days of discovery of the condition, and changes to the Contract Price may be made in accordance with Article 7 entitled "Changes in the Work." Trade Contractor agrees that no claim against District will be made by Trade Contractor for damages and hereby waives any rights to damages in the event the Trade Contractor fails to notify District within the five-day period mentioned above.

WARNING: DISTRICT DOES NOT WARRANT THE SOILS AT THE PROJECT SITE. TRADE CONTRACTOR HAS REVIEWED AND IS FAMILIAR WITH THE REQUIREMENTS OF THE SOILS INVESTIGATION REPORT. TRADE CONTRACTOR UNDERSTANDS THAT PLANS, DRAWINGS AND SPECIFICATIONS SUPERSEDE THE SOILS REPORT IF THERE ARE CONFLICTS. FURTHER, IN ADDITION TO THE INFORMATION IN THE SOILS REPORT, TRADE CONTRACTOR HAS CONDUCTED AN INDEPENDENT INVESTIGATION OF THE PROJECT SITE AND THE SOILS CONDITIONS OF THE SITE. DISTRICT DOES NOT WARRANT THE SOILS CONDITIONS OF THE SITE AND TRADE CONTRACTOR IS FULLY RESPONSIBLE TO ASCERTAIN SITE

CONDITIONS FOR THE PURPOSES OF DETERMINING CONSTRUCTION MEANS AND METHODS PRIOR TO COMMENCING CONSTRUCTION.

2.1.4 Utilities

2.1.4.1 *Location of Point of Connection.* The locations shown for the point of connection are approximate. It shall be the responsibility of the Trade Contractor to determine the exact location of all service connections.

2.1.4.2 *Regional Notification Center.* Trade Contractor, except in an emergency, shall contact the appropriate regional notification center at least two (2) business days prior to commencing any excavation if the excavation will be conducted in an area or in a private easement which is known, or reasonably should be known, to contain subsurface installations other than the underground facilities owned or operated by the District, and obtain an inquiry identification number from that notification center. See Government Code Section 4216.3. No excavation shall be commenced and carried out by Trade Contractor unless such an inquiry identification number has been assigned to Trade Contractor or any Subcontractor of Trade Contractor and the District has been given the identification number by Trade Contractor. Any damages arising from failure to make appropriate regional notification shall be at the sole risk of Trade Contractor. Trade Contractor shall solely be responsible for any fines, penalties or damages for violation of this Article and Government Code Section 4216.6 or 4216.7. Any delays caused by failure to make appropriate regional notification shall be at the sole risk of Trade Contractor and shall not be considered for extension of time pursuant to Article 8.4.

2.1.4.3 *Utilities - Removal and Restoration.* The District has endeavored to determine the existence of utilities at the Site of the Work from the records of the District of known utilities in the vicinity of the Work. The positions of these utilities as derived from such records are shown in the Contract Documents. Thus, the locations of the main or trunklines located on the Drawings are approximate locations and not exact.

No excavations were made to verify the locations shown for underground utilities. Other than the main or trunkline, which the District has endeavored to locate on the Plans, service connections or laterals to these utilities may not be shown on the Plans. It shall be the responsibility of Trade Contractor to determine the exact location of all service connections. Trade Contractor shall make its own investigations, including exploratory excavations, to determine the locations and type of service connections, prior to commencing work which could result in damage to such utilities. Trade Contractor shall immediately notify the District's representative as to any utility main or trunkline discovered by Trade Contractor in a different position than provided by the Regional Notification Center. With respect to main or trunklines, Trade Contractor is to immediately notify District if the location is substantially different than as shown in the Contract Documents.

Trade Contractor shall coordinate its Work with all utilities, including, but not limited to electricity, water, gas and telephone and meet with said utilities prior to the start of any work. Trade Contractor shall show timing of all utility coordination activities under the Scheduling requirements of Article 8.

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

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

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

When it is necessary to remove, relocate, or temporarily maintain a utility which is not shown on the Plans or is in a position different from that shown on the Plans and were it in the position shown on the Plans would not need to be removed, relocated, or temporarily maintained, and the cost of which is not required to be borne by the owner thereof, the District will make arrangements with the owner of the utility for such work to be done at no cost to Trade Contractor, or will require Trade Contractor to do such work in accordance with Article 7 or will make changes in the alignment and grade of the Work to obviate the necessity to remove, relocate, or temporarily maintain the utility. Changes in alignment and grade will be ordered in accordance with Article 7 herein.

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

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

2.1.5 Existing Utility Lines; Removal, Relocation

2.1.5.1 *Main or Trunkline Facilities.* If Trade Contractor, while performing the Contract, discovers utility facilities not identified in the Contract Documents, Trade Contractor shall notify the District and utility in writing prior to commencing work.

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

Trade Contractor shall exercise reasonable care and shall be compensated by the District for the actual verified field costs of locating, and removing, relocating, protecting or temporarily maintaining such main or trunkline utility facilities located in a substantially different location than in the Plans and Specifications, and for equipment in use on the Project necessarily idled during such work. This Work shall be performed in accordance with Article 7 of these General Conditions.

2.1.5.2 *Assessment.* Nothing in these subparagraphs shall be deemed to require the District to indicate the presence of existing service laterals or appurtenances whenever the presence of such utilities on the Site can be inferred from the presence of other visible facilities, such as buildings, or

meter junction boxes on or adjacent to the Site and could be inferred from the Main or Trunkline shown on the Drawings.

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

2.1.6 Easements

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

2.2 DISTRICT'S RIGHT TO CARRY OUT THE WORK DUE TO PARTIAL DEFAULT IN A SPECIFIC SEGREGATED AREA OF WORK (TWO (2) BUSINESS DAY NOTICE TO CURE AND CORRECT)

If Trade Contractor Defaults or neglects to carry out the Work in accordance with the Contract Documents, the District may provide a two (2) business day written notice to cure (a shorter period of time in the case of Emergency or a critical path delay as defined in Article 2.2.1) Trade Contractor's Partial Default in a specific segregated area of work. The District's right to issue a Partial Default of the Trade Contractor's Work and take over that segregated area of Work includes, but is not limited to:

1. Failure to supply adequate workers on the entire Project or any part thereof;
2. Failure to supply a sufficient quantity of materials;
3. Failure to perform any provision of this Trade Contract;
4. Failure to comply with safety requirements, or due to Trade Contractor creation of an unsafe condition;
5. Cases of bona fide emergency;
6. Failure to order materials in a timely manner;
7. Failure to prepare Deferred Approval items or Shop Drawings in a timely manner;
8. Failure to comply with submission of Trade Contractor's Baseline or Update Schedule, failure to comply with Project Baseline Schedule or Update Schedule, meet critical Milestones which may result in a delay to the critical path, or Delay the Contract Time;
9. Failure to comply with the Subletting and Subcontracting Fair Practices, Public Contract Code Section 4100, et seq.
10. Failure to meet the requirements of the Americans with Disabilities Act;
11. Failure to complete Punch List work;

12. Failure to proceed on an Immediate Change Directive
13. Failure to correct a Notice of Deviation

If during the two (2) business day period, the Trade Contractor fails to Cure and correct the deficiency noted in the notice of Partial Default with diligence and promptness, the District may correct such deficiencies without prejudice to other remedies the District may have, including a Termination for Cause as set forth in Article 14. If there are inadequate funds remaining the Project balance or in the Retention Escrow to address at least 150% of the costs set forth in the Article 2.2 notice, the District may copy the Surety on the written notice of Partial Default. If a notice to the Surety is provided, except in the cases of Emergency or critical path delay, the Surety has the option to take over and complete the Work described in the written notice if Surety personally delivers notice to District that it intends to perform such work. In the case where written notice has been provided, the District shall allow Surety seven (7) days to perform the Work.

2.2.1 Service of Notice of Partial Default with Right to Cure

A written notice of Partial Default and Right to Cure under Article 2.2 (“Article 2.2 Notice” or “Notice of Partial Default”) shall be served by facsimile (with a copy provided by e-mail to the e-mail address provided on the Bid submitted and copied to the Project Superintendent).

2.2.2 Shortened Time for Partial Default in the Case of Emergencies.

In an Emergency situation, the District may correct any of the deficiencies described in Article 2.2 without prejudice to other remedies by providing service of written notice of Emergency requiring a shortened time for Partial Default specifying the time given to Cure, if any.

2.2.3 Shortened Time for Partial Default in the Case of Critical Path Delay

In the case of critical path delay, the District may correct any of the deficiencies described in Article 2.2 without prejudice to other remedies providing service of written notice of critical path delay to the Trade Contractor with a specific description of the critical path delay items noting the line item or area of Work that is on the critical path and prescribe the length of shortened time to cure, if any.

2.2.4 Written Notice of Partial Default to be Deducted by Deductive Change Order

The District shall have the right to determine the reasonable value of the Article 2.2 Partial Default Work, or if there is an actual value for the Work, shall use that value and issue a Deductive Change Orders under Article 7.7.4.

**ARTICLE 3
THE TRADE CONTRACTOR**

3.1 SUPERVISION AND CONSTRUCTION PROCEDURES

3.1.1 Trade Contractor

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

- a. *Responsibilities.* It is the duty of Trade Contractor to complete the Work covered by his or her Contract in accordance with the approved Plans and Specifications. Trade Contractor in no way is relieved of any responsibility by the activities of the Architect, Engineer, Inspector or DSA in the performance of their duties.
- b. *Performance of the Work.* Trade Contractor shall carefully study the approved Plans and Specifications and shall plan its schedule of operations well ahead of time. If at any time it is discovered that work is being done which is not in accordance with the approved Plans and Specifications, Trade Contractor shall correct the Work immediately.

3.1.2 Trade Contractor Responsibility to Study the Plans and Specifications and Plan for Coordination with Other Trade Contractors

All inconsistencies or timing or sequences which appear to be in error in the Plans and Specifications shall promptly be called to the attention of the Architect or, Engineer, for interpretation or correction. Local conditions which may affect the structure shall be brought to the Architect's attention at once. In no case, shall the instruction of the Architect be construed to cause work to be done which is not in conformity with the approved Plans, Specifications, Change Orders, Construction Change Documents, and as required by law. (See Title 24 Section 4-343). Trade Contractor shall also establish likely conflicts with the Work of other Trade Contractors through careful pre-planning of the Work set forth in the Scope of Work. If any Work is dependent on other Trades, Trade Contractor shall identify the coordination required and address in Trade Contractor Meetings and directly with other Trade Contractor. All Coordination with other Trades shall be identified in the Trade Contractor Baseline Schedule and in Trade Contractor Schedule Updates.

3.1.2.1 BIM Conflict Resolution [If BIM is utilized]. Trade Contractors shall review and address all Clash Detection reports provided for the Trade Contractor's Scope of Work during the Initial Coordination Construction Meetings. Trade Contractor is under an obligation to work through identified Clash Detection or else Trade Contractor waives all rights to any consequential damages that may arise from failure to address Clash or Coordination issues identified prior to the start of Trade

Contractor's Scope of Work. Waiver of consequential damages shall include the waiver of delays caused by failure to address conflict or clashes in the Trade Contractor's Work specifically identified and disruption, acceleration or additional costs other than for the actual cost of the additional Change Order Work itself. Further, Trade Contractor shall remain responsible for all consequential damages from other Trade Contractors for Trade Contractor's failure to address Clash Check detection or coordination issues identified by CM prior to the start of Trade Contractor's Scope of Work that Trade Contractor fails to address, make revisions, or seek COR's immediately following identification of the Coordination issue or Clash Check that has been identified.

3.1.3 All Work Under the Direction of Inspector

Pursuant to Title 24 requirements, Trade Contractor shall not carry on Work except with the knowledge of the Inspector. (See Title 24 generally) All notifications to the Inspector shall also be copied to the CM.

3.1.4 Trade Contractor to Establish Timing and Protocol with Inspector

Trade Contractors shall work together and with CM to establish a protocol for requesting inspection with Inspector so as to not delay the Work and provide adequate time for the Inspector to perform inspection. If such a protocol is not established ahead of time, Inspector may utilize the time criteria set by Title 24 of 48 hours in advance of submitting form DSA 156 for each new area. DSA requirements under PR 13-01 specifically gives the Special Inspector fourteen (14) days to post to the DSA website. Trade Contractor is responsible for delays and for failure to plan.

For some Projects, there may be a need to incrementally install certain assemblies. It is up to Trade Contractor to identify areas and assemblies that may be constructed incrementally. Trade Contractor must identify and establish incremental areas of construction, determine other Trade Contractors that are required for the incremental areas and establish protocols with Inspector for DSA 152 approvals so they may be presented to DSA. See PR 13-01 item 1.17 for further discussion.

3.1.5 Verified Reports

The Trade Contractor shall make and submit to the office from time to time, verified reports as required in Title 24 Section 4-366. As part of the Close-Out of the Project (see Article 9.9), Trade Contractor shall be required to execute a Form 6-C as required under Title 24 Sections 4-343.

Trade Contractor shall fully comply with any and all reporting requirements of Education Code Sections 17315, et seq., in the manner prescribed by Title 24, as applicable.

3.1.6 Trade Contractor Responsibility

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

3.1.7 Obligations not Changed by Architect's Actions

The Trade Contractor shall not be relieved of obligations to perform the Work in accordance with the Contract Documents either by activities or duties of the Architect in the Architect's

administration of the Contract or by tests, inspections, or approvals required or performed by persons other than the Trade Contractor.

3.1.8 Acceptance/Approval of Work

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

3.2 SUPERVISION

3.2.1 Full Time Supervision

Trade Contractor shall keep on the Work at all times at Initial Coordination Meetings, and as required by CM, at time during the progress of the Work, a competent, English speaking construction Superintendent satisfactory to the District. The Superintendent shall be present on a full-time basis, shall be dedicated exclusively to the Project and shall not share superintendence duties with another project or job. The Superintendent shall not be replaced except with written consent of the District. The Superintendent shall represent Trade Contractor and shall be fully authorized to receive and fulfill any instruction from the Architect, the Inspector, the District or any other District Representative (including CM in the cases where the District has a CM representative). All Requests for Information shall be originated by the Superintendent and responses thereto shall be given to the Superintendent. No Work shall begin on any day by any Subcontractor or other person on the Project site until the Superintendent has arrived, or shall any Work continue during the day after the Superintendent has departed from the Project site. The Superintendent shall have authority to bind Trade Contractor through the Superintendent's acts. The Superintendent shall represent the Trade Contractor, and communications given to the Superintendent shall be binding on Trade Contractor. Before commencing the Work, Trade Contractor shall give written notice to District (and CM representative) and Architect of the name and a Statement of Qualifications of such superintendent. Superintendent shall not be changed except with written consent of District, unless a superintendent proves to be unsatisfactory to Trade Contractor and ceases to be in its employ, in which case, Trade Contractor shall notify District and Architect in writing. Trade Contractor shall provide a replacement superintendent approved by the District prior to performing additional work.

3.2.2 Staff

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

3.2.3 Right to Remove

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

3.3 LABOR AND MATERIALS

3.3.1 Trade Contractor to Provide

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

3.3.2 Quality

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

3.3.3 Replacement

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

3.3.4 Discipline

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

3.3.5 Fingerprinting (Applicable at the time Project is Occupied and on all Projects where Workers will come in Contact with Pupils, such as Modernization Projects)

If applicable, Trade Contractor shall comply with the applicable provisions of Education Code Section 45125.1 in a method as determined by the District. Pursuant to Education Code Section 45125.1, Trade Contractor shall either conduct criminal background checks of all employees of Trade Contractor assigned to the Project site, and shall certify that no employees who have been convicted of serious or violent felonies, as specified in Education Code Section 45125.1, will have contact with pupils, by utilizing the Certification Regarding Background Checks and the corresponding Attachment "A" as found in the Contract Documents or shall be separated by a physical barrier from students.

If it is determined that Trade Contractor must provide certification of employees, as part of such certification, Trade Contractor must provide the District with a list of all employees providing services pursuant to this Agreement, and designate which sites such employees will be assigned. In

performing the services set forth in this Agreement, Trade Contractor shall not utilize any employees who are not included on the above-referenced list.

At District's sole discretion, District may make a finding, as authorized under Education Code Section 45125.1, that Trade Contractor's employees will have only "limited contact" with pupils. Trade Contractor's failure to comply with this law shall be considered a material breach of this Agreement upon where this Agreement may be terminated, at District's sole discretion, without any further compensation to Trade Contractor.

In the case of new construction Projects where there are no students, if the Project Schedule provides for Beneficial Occupancy or portions of the Project or if the Project should be delayed, then Trade Contractor, at no additional costs, shall meet the requirements of either fingerprinting or providing a physical barrier as required by the District.

3.3.6 Noise, Drugs, Tobacco, and Alcohol

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

3.3.7 Delivery of Material

Trade Contractor shall place orders for materials or equipment so that the Work may be completed in accordance with the Project Baseline Schedule for the Work as set forth in Article 8 of this Agreement. Trade Contractor shall, upon demand from the Architect, furnish to the Architect documentary evidence including, but not limited to purchase orders, invoices, bills of materials, work orders and bills of lading, showing that orders have been placed. Trade Contractor shall have a system to receive materials and to ensure that the proper materials are being delivered, including in the case of critical materials to the Project, checking the delivery against Shop Drawings and ensuring that the materials meet the requirements of not only the Plans and Specifications, but also the approved Shop Drawings and Submittals and in conformance with Trade Contractor's plan for delivery of materials (including but not limited to Trade Contractor's representations in Trade Contractor Baseline Schedule for the Project and Trade Contractor's equipment and materials schedule under Article 3.7.2.2). Trade Contractor shall be responsible for all costs of accepting non-conforming materials delivered to the Project given Trade Contractor's responsibilities and system for acceptance of deliveries. Trade Contractor shall notify Inspector and District Representative (including CM) as early as possible, in writing, of the delivery of materials for the Project. The deliveries shall include documentation identifying the shipment sufficiently so that the Inspector, Architect or District Representative (including CM) may review the materials that are received.

Under no circumstances shall materials be delivered to the Project site that are meant for another Project.

3.3.8 Liens and Other Security Interests of Subcontractors and Material Suppliers

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

Trade Contractor agrees to indemnify, defend and hold the District harmless from any liens, stop notices, or assertion of security interests, including judgments and levies. If after written notice Trade Contractor fails to address the lien, stop notice, or other security interest, the District may proceed to address the lien, stop notice or claim and seek reimbursement from Trade Contractor.

3.3.8.1 *Stop Notice Releases.* All stop notice releases shall be notarized and either executed by the same person who filed the stop notice or from an officer of the Trade Contractor or manager of Trade Contractor authorized to release stop notices.

3.3.9 Title to Materials

The title to new materials or equipment for the Work of this Contract shall remain with Trade Contractor until incorporated in the Work of this Contract until final acceptance of the Project; no part of said materials shall be removed from its place of storage, and Trade Contractor shall keep an accurate inventory of all said materials and equipment in a manner satisfactory to the District or its authorized representative. Responsibility for materials remains with Trade Contractor and Trade Contractor shall replace materials in case of loss. District similarly may pay for materials stored off site, but Trade Contractor shall remain responsible for the materials that are stored off site.

3.3.10 Assemblies

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

3.3.11 Noise Control

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

Construction equipment noise is subject to the control of the Environmental Protection Agency's Noise Control Program (Part 204 of Title 40, Code of Federal Regulations). If school is in session at any point during the progress of the Project, and, in the District's reasonable discretion, the noise from such Work disrupts or disturbs the students or faculty or the normal operation of the school, at the District's request, the Trade Contractor shall schedule the performance of all such Work around normal school hours or make other arrangements so that the Work does not cause such disruption or disturbance. There are specific periods of testing at operational schools and it is critical that Trade Contractor control noise during periods of testing. In no event shall Trade Contractor have a right to receive additional compensation or an extension to the Contract time as a result of any such rescheduling or the making of such arrangements. These controls shall be implemented during site preparation and construction. All noise related issues, including school operations, and noise during testing should be detailed in the Schedule provided pursuant to Article 8

3.4 WARRANTY

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

- a. In addition to any other warranties provided elsewhere, Trade Contractor shall, and hereby does, warrant all Work after the date of Notice of Completion of Work by District and shall repair or replace any or all such Work, together with any other Work, which may be displaced in so doing that may prove defective in workmanship or materials within a one (1) year period from date of Final Completion which shall be no later than the final date of Punch List as noted at Article 9.11) without expense whatsoever to District, ordinary wear and tear, unusual abuse or neglect excepted. District will give notice of observed defects with reasonable promptness. Trade Contractor shall notify District upon completion of repairs.
- b. In the event of failure of Trade Contractor to comply with above mentioned conditions within one week after being notified in writing, District is hereby authorized to proceed to have defects repaired and made good at expense of Trade Contractor who hereby agrees to pay costs and charges therefore immediately on demand.
- c. If, in the opinion of the District, defective Work creates a dangerous condition or requires immediate correction or attention to prevent further loss to the District, the District will attempt to give the notice required by this Article. If Trade Contractor cannot be contacted or does not comply with the District's requirements for correction within a reasonable time as determined by the District, the District may, notwithstanding the provisions of this article, proceed to make such correction or attention which shall be charged against Trade Contractor. Such action by the District will not relieve the Trade Contractor of the guarantee provided in this Article or elsewhere in this Contract.
- d. This Article does not in any way limit the guarantee on any items for which a longer warranty is specified or on any items for which a manufacturer gives a guarantee for a

longer period. Trade Contractor shall furnish District all appropriate guarantee or warranty certificates upon the Final Completion of the Project (See Article 9.11.5).

3.5 TAXES

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

3.6 PERMITS, FEES AND NOTICES

3.6.1 Payment

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

3.6.1.1 *DSA Fees.* DSA policy is to charge CCD review fees for processing and approval of changes in the Plans and Specifications through the Construction Change Document process. Trade Contractor is specifically directed to the current DSA IR A-30 which provides fee structure and charges that will be incurred for proceeding with respect to the CCD process, a process that must be followed for each change in the Plans and Specifications.

3.6.2 Compliance

The Trade Contractor shall comply with and give notices required by any law, ordinance, rule, regulation, and lawful order of public authorities bearing on performance of the Work. Specifically, the Division of State Architect provides State oversight of the Project and enforcement of Title 24 rules and regulations. Trade Contractor is directed to the DSA website. There will be local governmental oversight from City, County or both. Finally, Regional Water Quality Control Board, State Fire Marshall, local fire marshal, Department of Industrial Relations, Department of Labor Standards Enforcement, and Air Quality Management District (Local and State) are some of the agencies that provide oversight and may require specific permits, fees, or provide oversight over the Project. Trade Contractor represents understanding and specialized knowledge of the rules governing school districts and Trade Contractor shall maintain compliance over the applicable rules and will file all documents required in order to ensure compliance with State, local, and other rules that apply to the Project.

3.6.3 Responsibility

Trade Contractor shall perform all Work in conformance with every law, statute, ordinance, Building Code, rule or regulation. The Trade Contractor shall assume full responsibility for such Work and shall bear the attributable cost of correction or Project delay.

Pursuant to Title 24 Section 4-343(b),

“Contractor shall carefully study the approved Plans and Specifications and shall plan a schedule of operations well ahead of time.... All inconsistencies or items which appear to

be in error in the Plans and Specifications shall be promptly called to the attention of the architect or registered engineer, through the Inspector, for interpretation or correction.”

To help Trade Contractor plan its operations, Trade Contractor is directed to study the current version of the DSA 152 Inspection Card Manual identifying the exact steps the Inspector is to follow in the review and sign off process for the DSA 152. The DSA 152 Inspection Card Manual provides specific detail as to the order of operations, review items and compliance items beyond the Specifications and Plans which are reviewed for DSA compliance. The most current version of this manual is located on DSA’s website.

Trade Contractor is also specifically directed to the time periods for posting of Special Inspection Reports and Inspector Notifications under DSA PR 13-01 since the timing of Inspection is not a Governmental Entity related delay.

3.7 SUBMITTALS REQUIRED AT THE COMMENCEMENT OF THE PROJECT

3.7.1 Requirements Within Five (5) Calendar Days

Within ten (10) calendar days after Notice to Proceed, Trade Contractor shall submit the following:

3.7.1.1 Detailed Schedule of Values (See Article 9.2)

3.7.1.2 Submittal Listing and Schedule for Submittals

3.7.1.3 Critical Path Schedule (See Article 8)

3.7.2 Requirements Within Thirty-Five (35) Calendar Days

Within thirty-five (35) calendar days after the Notice to Proceed, Trade Contractor shall submit the following:

3.7.2.1 *All Submittals for the Project* except those specifically agreed upon by District and Architect, in writing, and shall be specifically incorporated into the Submittal section of the Schedule so as to not delay the Work. The agreement to allow a later Submittal does not mean that Article 3.3.7 is waived. Trade Contractor shall order materials and ensure prices are honored and secured for the Project.

- a. Structural Steel may be included as a later Submittal than 35 days if Structural Steel is a significant portion of the Work, at least one or some of the Project is a structural steel structural system, or as specifically agreed upon by the Architect or District.
- b. It is specifically agreed that submissions of structural steel Submittals shall not be piecemeal (unless some portion is requested separately by the District or Architect), shall provide complete designs, shall be stamped by the Structural Steel Subcontractor, Trade Contractor, and structural steel Subcontractor’s structural engineer at time of submission and as further addressed in Article 3.9.
- c. In no case shall the submission of structural steel drawings delay the critical path for the Schedule. If a Milestone is provided for submission of complete

structural steel Shop Drawings then the date shall be no later than as set forth in the Milestone

3.7.2.2 Exceptions to Submittal Within Thirty-Five (35) Days by Written Agreement.

A written request detailing the specific reasons for a submission later than 35 days due to complexity of design or non-critical path status of the Submittal shall be submitted at the time the Trade Contractor Baseline Schedule is submitted. The Trade Contractor Baseline Schedule shall not include a delayed Submittal until written agreement is provided. In addition to the request for providing a Submittal after the thirty-five (35) day period, a copy of the Contract with the Subcontractor who shall be performing the Submittal, a written statement from the Subcontractor verifying that work has commenced on the Submittal and providing Subcontractor's own schedule of milestones and completion dates, and a corresponding Submittal designation in the Schedule as required under Article 8. Approval of a delayed Submittal shall not result in any increase in the Contract Price or result in an extension of time for the completion of the Project.

3.7.2.3 Piecemeal Submissions of Submittals. Piecemeal Submittal means providing portions of Shop Drawings or Submittals as they are being completed. The submission of piecemeal Submittals results in the appearance of a submission when there is inadequate information for the Architect or Engineer to adequately review a submission. Piecemeal differs from submission of complete buildings or phases of buildings or complete assemblies. The Architect may agree in writing to allow submission of single buildings or areas as long as the Submittals are complete.

3.7.2.4 Liquidated damages for untimely submittals. It is critically important to obtain timely and complete submittals from all contractors on this project in order to prevent disruption to the project schedule. If the project is not completed in accordance with the project schedule, it is understood that the District will suffer damage. It is agreed that the Contractor will pay the District **ONE THOUSAND DOLLARS (\$1,000.00)** per calendar day liquidated damages, and not as a penalty, for each calendar day which the CONTRACTOR's submittals are late beyond the terms in Article 3.7.2 of Section 00700 GCS:A3. In the event a Contractor's failure to provide complete submittals delays or contributes to a delay of an activity on the project schedule critical path, then said liquidated damages shall be increased to the liquidated damage amount specified in document 00500 AGREEMENT.

3.8 DOCUMENTS, SAMPLES, AND COMPUTER AT THE SITE

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

Trade Contractor shall have an operational computer with internet access so Trade Contractor can review and post documents as required for the Project, including but not limited to the filing and posting of DSA required documents for the Project.

Trade Contractor shall be prepared to review documents posted to the DSA Project website.

3.9 SUBMITTALS INCLUDING SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES

3.9.1 Definitions

3.9.1.1 *Deferred Approvals.* Approval of certain aspects of the construction may be deferred until the construction Contract has been awarded. To facilitate the design process, DSA grants Deferred Approval to the design and detailing of certain elements of the Project at the request of the Architect or Engineer of Record. Design elements that may be deferred may include, but are not limited to access floors, bleachers, elevator guide rails and related elevator systems, exterior wall systems - precast concrete, glass fiber reinforced concrete, etc. , skylights, window wall systems, storefronts, stage rigging, and other systems as noted in the Contract Documents. (Also see Article 1.2.2 and 3.9.3)

3.9.1.2 *Shop Drawings.* The term “Shop Drawings” as used herein means drawings, diagrams, equipment or product schedules, and other data, which are prepared by Trade Contractor, Subcontractors, manufacturers, suppliers, or distributors illustrating some portion of the Work, and includes: illustrations; fabrication, erection, layout and setting drawings; manufacturer’s standard drawings; schedules; descriptive literature, instructions, catalogs, and brochures; performance and test data including charts; wiring and control diagrams; and all other drawings and descriptive data pertaining to materials, equipment, piping, duct and conduit systems, and methods of construction as may be required to show that the materials, equipment, or systems and their position conform to the requirements of the Contract Documents.

3.9.1.3 *Manufactured* applies to standard units usually mass-produced, and “Fabricated” means items specifically assembled or made out of selected materials to meet individual design requirements. Shop Drawings shall: establish the actual detail of all manufactured or fabricated items, indicate proper relation to adjoining work, amplify design details of mechanical and electrical systems and equipment in proper relation to physical spaces in the structure, and incorporate minor changes of design or construction to suit actual conditions.

3.9.1.4 *Submittals* is a term used interchangeably and sometimes refers to Shop Drawings, Product Data, and samples since all Subcontractor submissions are tracked in a Submittal Log and may include any of the noted items. However, generally, a Submittal is a manufacturer’s product information and Product Data including description, characteristics, size, physical characteristics, and requirements to prepare the jobsite for receiving of the particular manufactured item.

3.9.1.5 *Samples.* The term “samples” as used herein are physical examples furnished by Trade Contractor to illustrate materials, equipment, or quality and includes natural materials, Fabricated items, equipment, devices, appliances, or parts thereof as called for in the Specifications, and any other samples as may be required by the Architect to determine whether the kind, quality, construction, finish, color, and other characteristics of the materials, etc., proposed by Trade Contractor conform to the required characteristics of the various parts of the Work. All Work shall be in accordance with the approved samples.

3.9.2 Shop Drawings.

3.9.2.1 *When Shop Drawings Are Required.* Shop Drawings are required for pre-Fabricated components and for installation and coordination of these pre-Fabricated components into the Project. In addition, Shop Drawings, are prepared to address the actual size and installation of components from various Subcontractors and provides an opportunity for Trade Contractor to coordinate

and address conflicts between the subcontracting trades. In some cases, each Subcontractor or trade will provide Shop Drawings in a BIM format or other format as agreed by District.

3.9.2.2 *Purpose for Shop Drawings.* Shop Drawings are Trade Contractor's manufacturer, Subcontractor, supplier, vendor or the Trade Contractor's detailed drawings showing particularized method for assembly, specifics to a manufacturer, manufacturer component installation requirements, specifics as to a manufactured item, alterations to a manufactured, a custom created item, or drawn version of more detailed information expanding on the Architect's design shown in the Contract Documents. The Shop Drawings address the appearance, performance, size, weight, characteristics and prescriptive descriptions associated with the Trade Contractor or Trade Contractor's Subcontractor's plan for installation or assembly based on the design in the Specifications and Contract Documents. The Shop Drawing often is more detailed than the information shown in the Contract Documents to give the Architect and Engineer the opportunity to review the fabricator's version of the product (along with particulars specific to that particular product), prior to fabrication. References to the Contract Documents, Construction Documents, Drawings, Plans, and Specifications assist the Architect and Engineer in their review of the Shop Drawings. Attachment of manufacturer's material specifications, "catalog cut sheets," and other manufacturer's information may be provided to accompany Shop Drawings. Because Shop Drawings facilitate the Architect's and Engineer's approval of the system, they should be as clear and complete as possible so they may be reviewed by Architect or Engineer for the Project.

3.9.2.3 *Shop Drawing Requirements.* Trade Contractor shall obtain and submit with Shop Drawings all seismic and other calculations and all Product Data from equipment manufacturers. "Product Data" as used herein are illustrations, standard schedules, performance charts, instructions, brochures, diagrams, and other information furnished by Trade Contractor to illustrate a material, product, or system for some portion of the Work.

3.9.2.4 *Not a Reproduction of Architectural or Engineering Drawings.* The Shop Drawings are not a reproduction of the architectural or engineering Drawings. Instead, they must show more detail than the Construction Documents and details the fabrication and/or installation of the items to the manufacturer's production crew or Trade Contractor's installation crews.

3.9.2.5 *Shop Drawings Engineering Requirements:* Some Shop Drawings require an engineer stamp to be affixed on the Drawings and calculations. In such cases, a current and valid engineering stamp shall be affixed by a California registered engineer. No out of state engineers shall stamp Shop Drawings. (See DSA IR A-18). In most cases, an engineer means California registered mechanical, structural, electrical or plumbing engineer. California Registered Civil Engineers will not be accepted for structural details unless specifically approved by DSA.

3.9.2.6 *DSA Approvals Required Prior to Work.* No work on a Shop Drawing that requires DSA approval may proceed until DSA approval is received. Trade Contractor has provided DSA approval time and allowed adequate time for corrections in Trade Contractor's Schedule as required pursuant to Article 8.

3.9.2.7 *Shop Drawing Identification.* All Shop Drawings must be properly identified with the name of the Project and dated, and accompanied by a letter of transmittal referring to the name of the Project and to the Specification section number for identification of each item clearly stating in narrative form, as well as "clouding" all qualifications, departures, or deviations from the Contract Documents. Shop Drawings, for each section of the Work shall be numbered consecutively and the numbering system shall be retained throughout all revisions. All Subcontractor submissions shall be

made through Trade Contractor. Each drawing shall have a clear space for the stamps of CM, Architect and Trade Contractor.

3.9.3 Deferred Approvals

Deferred approvals shall be submitted and processed to ensure all DSA and other governmental approvals are secured so as to not delay the Project. There may be additional requirements for Deferred Approvals at Division 1 of the Specifications. All Deferred Approvals shall be prepared by Trade Contractor or Trade Contractor's agent early enough so as to not delay the Project. Trade Contractor is aware that Title 24 California Code of Regulations Section 4-317 has specific requirements for Deferred Approval as to governing agencies and as to the Architect and Engineer for the Project. As a result, any delay associated with the time for approval by applicable agencies or by the Architect or Architect's consultants shall be Trade Contractor's. Trade Contractor is required to comply with inclusion of Deferred Approvals in the Schedule as required under Article 3.9.6 *DSA Approvals Required Prior to Work*. No work on a Deferred Approval item may proceed on the components until DSA approval is received. Trade Contractor has provided DSA approval time and allowed adequate time for any DSA revisions in Trade Contractor's Schedule as required pursuant to Article 8.

3.9.4 Submittals and Samples

3.9.4.1 *Information Required With Submittals*: Manufacturer, trade name, model or type number and quantities: Information provided must be of sufficient detail to allow Architect and Engineer to compare the submitted item with the specified products and acceptable products listed, in the Specifications and addenda.

3.9.4.2 *Description of Use and Performance Characteristics*: Information should be furnished describing the normal use and expected performance of the product. The Design Team and Trade Contractor review this information to confirm that the product is appropriate for the intended use.

3.9.4.3 *Size and Physical Characteristics*: The size and physical characteristics, such as adjustment capabilities, which is reviewed by both the Trade Contractor, and Design Team. The Trade Contractor has the most available information for comparing adjoining materials and equipment. Trade Contractor also needs to know the size and weight of the equipment for lifting and handling considerations.

3.9.4.4 *Finish Characteristics*: The Architect reviews the available finishes and selects the appropriate finish, if the finish was not previously specified in the documents. Trade Contractor should confirm that finish requirements in the Specifications are being met by the product.

3.9.4.5 *Trade Contractor Responsible for Jobsite Dimensions*: Some material is custom-fabricated to job conditions, requiring dimensions from the jobsite. These jobsite dimensions are provided by Trade Contractor as part of Trade Contractor's responsibilities for the Project and shall be provided prior to release of the product for manufacture. Trade Contractor shall not rely on Architect or Engineers to provide jobsite dimensions.

3.9.4.6 *Full Range of Samples Required (When Specific Items Not Specified)*. Except in cases where the exact color and type of item is specified since the District is utilizing items Standardized or pre-selected by District, the full range of color, graining, texture, or other characteristics are anticipated for review in finished products, a sufficient number of samples of the specified materials shall be furnished by the Trade Contractor to indicate the full range of characteristics which will be

present in the finished products. Products delivered or erected without Submittal and approval without providing a full range of samples shall be subject to rejection. Except for range samples, and unless otherwise called for in the various sections of the Specifications or Specification Section 1, samples shall be submitted in duplicate.

3.9.4.7 *Labeling of Samples.* All samples shall be marked, tagged, or otherwise properly identified with the name of the submitting party, the name of the Project, the purpose for which the samples are submitted and the date.

3.9.4.8 *Transmittal letter.* All samples shall be accompanied by a letter of transmittal containing similar information, together with the Specification section number.

3.9.4.9 *Labels and Instructions.* All samples of materials shall be supplied with the manufacturer's descriptive labels and application instructions. Each tag or sticker shall have clear space for the review stamps of Trade Contractor and Architect.

3.9.4.10 *Architect's Review.* The Architect and CM will review and, if appropriate, approve submissions and will return them to Trade Contractor with the Architect's stamp and signature applied thereto, indicating the timing for review and appropriate action in compliance with the Architect's (or District's) standard procedures. CM may, in some cases, reject samples that are not in conformance with Contract requirements without sending the Submittal on to the Architect.

3.9.5 Submittal Submission Procedure

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

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

3.9.5.3 *Corrections.* Trade Contractor shall make all corrections required by the Design Team and shall promptly resubmit corrected Submittals until approved. Trade Contractor shall direct specific attention in writing or on resubmitted Shop Drawings to revisions other than the corrections required by the Architect on previous submissions. Professional services required for more than one (1) re-review of required Submittals of Shop Drawings, Product Data, or samples are subject to charge to the Trade Contractor pursuant to Article 4.5.

3.9.5.4 *Approval Prior to Commencement of Work.* No portion of the Work requiring a Shop Drawing or sample submission or other Submittal shall be commenced until the submission has been reviewed by Trade Contractor and CM and approved by Architect unless specifically directed in writing by the Architect. All such portions of the Work shall be in accordance with approved Submittals.

3.9.5.5 *District's Property.* All Submittals, Shop Drawings, computer disks, BIM modeling information, Clash Checks, schedules, annotated Specifications, samples and other Submittals shall become the District's property upon receipt by the District or Architect.

3.9.6 Schedule Requirements for Submittals

Trade Contractor shall obtain and shall submit all required Submittals (i.e. Shop Drawings, Deferred Approvals, samples, etc.), in accordance with Trade Contractor's "Schedule for Submission of Shop Drawings and Samples" as required in the scheduling portion of the General Conditions at Articles 8 and the Specifications (as long as the Specifications do not conflict with General Conditions). In the case of conflict, the conflicting provision shall be controlled by the General Conditions and the remaining Specification sections shall be interpreted as if the general conditions language is inserted) with such promptness as to cause no delay in its own Work or in that of any other contractor or Subcontractor but in no event later than thirty five (35) days after the Notice to Proceed is issued except in the specific cases noted as an exception under Article 3.7.2.1. No extensions of time will be granted to Trade Contractor because of its failure to have Submittals submitted in accordance with the requirements of this Article and the Project Baseline Schedule or Updated Schedule. Subcontractors for Trade Contractor shall submit Submittals for the review of the District, the Trade Contractor, and the Architect through the Trade Contractor.

3.9.6.1 *Consideration of Schedule.* Trade Contractor has considered lead times, DSA or other agency governmental review times, Architect or Engineer review times, manufacturing seasons, and specific long lead procurement concerns for all submittals for the Project.

3.9.7 General Submittal Requirements

3.9.7.1 *Trade Contractor Submittal Representations and Coordination.* By submitting Shop Drawings, Product Data, samples, etc., the Trade Contractor represents that it has determined and verified all materials, field measurements, catalog numbers, related field construction criteria, and other relevant data in connection with each such submission, and that it has checked, verified, and coordinated the information contained within such Submittals with the requirements of the Work and of the Contract Documents, including the Project Baseline Schedule and Updated Schedules.

3.9.7.2 *Trade Contractor Coordination.* Trade Contractor shall stamp, sign, and date each Submittal indicating its representation that the Submittal meets all of the requirements of the Contract Documents and evidence Trade Contractor's review through execution of the following stamp to be placed on each Shop Drawings:

"The [Trade Contractor] has reviewed and approved the field dimensions and the construction criteria, and has also made written notation regarding any information in the Shop Drawings and Submittals that does not conform to the Contract Documents. This Shop Drawing or Submittal has been coordinated with Shop Drawings and Submittals that may affect my Work and this duty of coordination has not been delegated to subcontractors, material suppliers, the Architect, or the Engineers on this Project.

Signature of Trade Contractor and date

3.9.7.3 *No Deviation from Contract Documents.* The submission of the Shop Drawings, Product Data, samples, etc., shall not deviate from the requirements of the Contract Documents including detailing and design intent which is specifically outlined in Contract Documents except as specifically authorized by the Architect or through an accepted substitution pursuant to Article 3.10.4. All deviations from the Contract Documents shall be narratively described in a transmittal accompanying the Shop Drawings. However, Shop Drawings shall not be used as a means of requesting a substitution, the procedure for which is defined in Article 3.10.4, “Substitutions.”

3.9.7.4 *Trade Contractor Responsibility for Shop Drawings Conformance to Contract Documents.* Review by District and Architect shall not relieve the Trade Contractor from its responsibility in preparing and submitting proper Submittals and Shop Drawings in accordance with the Contract Documents.

3.9.7.5 *Incomplete Submittals.* Any submission, which in CM or Architect’s opinion is incomplete, contains errors, or has been checked superficially, will be returned not reviewed by the Architect for resubmission by Trade Contractor. The Trade Contractor shall be responsible for any related delays and shall not be the basis for any Claim.

3.9.7.6 *Shop Drawings and Submittals Shall Not Be Used as a Method to Make a Substitution.* Shop Drawings and Submittals shall not be used as a means of requesting a substitution or to make changes in the Contract Documents. If changes are made to the Contract Documents through the Shop Drawings, the Architect shall have the right to reject the Submittal. If the Architect does not note the deviation from the approved Plans and Specifications, Trade Contractor is still responsible for the change and the Design Team may require the Shop Drawings be revised to properly reflect the approved Contract Documents. The Design Team may also require that the Trade Contractor bear all costs under Article 4.5 and consequential damages associated with a CCD to revise Plans and Specifications to accommodate the deviation from approved Plans and Specifications.

3.9.7.7 Extent of Review. In reviewing Shop Drawings, the Design Team and engineers for the Project will not verify dimensions and field conditions. Review of field dimensions is Trade Contractor’s responsibility. The Architect will review and approve Shop Drawings, Product Data, samples, etc., for aesthetics and for conformance with the design concept of the Work and the information in the Contract Documents. The Architect’s review shall neither be construed as a complete check which relieves the Trade Contractor, Subcontractor, manufacturer, fabricator, or supplier from responsibility for any deficiency that may exist or from any departures or deviations from the requirements of the Contract Documents unless the Trade Contractor has, in writing, called the Architect’s attention to the deviations at the time of submission. The Architect’s review shall not relieve Trade Contractor from responsibility for errors of any sort in Shop Drawings or schedules, for proper fitting of the Work, coordination of the differing trades and Shop Drawings and Work which is not indicated on the Shop Drawings at the time of submission of Shop Drawings. Trade Contractor shall be solely responsible for any quantities which may be shown on the Submittals or Contract Documents.

3.10 SUBSTITUTIONS

3.10.1 Definition

A Substitution is a change in product, material, equipment, or method of construction from those required by the Construction Documents proposed by Trade Contractor. For this Project, a Substitution is subject to the filing of a Construction Substitution Request Form at the time of bid and meeting the requirements of this Article.

3.10.2 One Product Specified

Unless the Specifications state that no substitution is permitted, whenever the Contract Documents indicate any specific article, device, equipment, product, material, fixture, patented process, form, method, or type of construction or any specific name, make, trade name, or catalog number, with or without the words “or equal,” such specification shall be deemed to be used for the purpose of facilitating description of the material, process, or article desired and shall be deemed to be followed by the words “or equal.” Subject to the requirements of properly submitting a Substitution Request for as Addressed in Article 3.10.4, Trade Contractor may, unless otherwise stated, offer any material, process, article, etc., which shall be materially equal or better in every respect to that so indicated or specified (“Specified Item”) and will completely accomplish the purpose of the Contract Documents.

3.10.3 Products Specified Which Are Commercially Unavailable

If the Trade Contractor fails to make a request for substitutions for products, prior to the submission of its bid, and such products subsequently become commercially unavailable, the Trade Contractor may request a substitution for such commercially unavailable item. The decision to grant this request is solely at the District’s discretion. The written approval of the District, consistent with the procedure for Change Orders, shall be required for the use of a proposed substitute material. The District may condition its approval of the substitution upon the delivery to District of an extended warranty or other assurances of adequate performance of the substitution as well as an equitable deduction in the Contract Price should the substituted item cost less than the Specified Item. All risks of delay due the approval of a requested substitution by the DSA, or any other governmental agency having jurisdiction, shall be on the requesting party. All additional costs, DSA review costs, all procurement and construction delays, and all costs for review by the Architect or its consultants shall be the responsibility of Trade Contractor under Article 4.5 and will be subject to a Deductive Change Order under Article 7.7.4.

3.10.4 Substitution Request Form

Requests for substitutions of products, materials, or processes in place of a Specified Item must be in writing on the District’s Substitution Request Form (“Request Form”) at the time of submitting bids to the District, except as provided for in Article 3.10.3.

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

- a. Is equal in quality/service/ability to the Specified Item;
- b. Will entail no changes in detail, construction, and scheduling of related work;
- c. Will be acceptable in consideration of the required design and artistic effect;

- d. Will provide no cost disadvantage to the District;
- e. Will require no excessive or more expensive maintenance, including adequacy and availability of replacement parts; and
- f. Will required no change of the construction schedule.

In completing the Request Form, the bidder must state, with respect to each requested substitution, whether the bidder will agree to provide the Specified Item in the event that the District denies the bidder's request for such requested substitution. In the event that the bidder has agreed in the Request Form to provide the Specified Item and the District denies the bidder's requested substitution for a Specified Item, the bidder shall provide the Specified Item without any additional cost or charge to the District.

After bids are opened, the apparent lowest bidder shall provide, within five (5) days of opening such bids, any and all Drawing, Specifications, samples, performance data, calculations, and other information, as may be required to assist the Design Team in determining whether the proposed substitution is acceptable. The burden of establishing these facts shall be upon the bidder.

After the District's receipt of such evidence by the bidder, the District will make its final decision as to whether the bidder's request for substitution for any Specified Items will be granted. The decision as to whether a proposed request for substitution is equal to a Specified Item shall be at the sole discretion of the District. Any request for substitution that is granted by the District shall be documented and processed though a Change Order. Trade Contractor must submit a complete Submittal of the requested substitution and a Shop Drawing showing configuration, dimensions, and other critical information associated with the substitution that meets the requirements of Article 3.9. The Design Team may condition its approval of any substitution upon delivery to the District of an extended warranty or other assurances of adequate performance of the substitution. Any and all risks of delay due to approval by the DSA or any other governmental agency having jurisdiction shall be on the bidder.

If the Design Team, as a whole, accepts a proposed substitution, Trade Contractor agrees to pay for all DSA review costs, engineering and design services, including, without limitation, compensation to the Architect and affected engineers for their required time to process such substitution through the DSA, if required, and to make all changes and adjustments in materials or the work of all trades directly or indirectly affected by the substituted item or items at no cost to the District.

3.10.5 Substitution Requests After Bid

The District, in its sole discretion, may accept a request for substitution by the Trade Contractor or may request Trade Contractor substitute a specified item. Any substitutions requested after bids are opened shall be subject to the same conditions and requirements set forth in Article 3.10.4 above. If any substitutions, that in the District or Design Team's determination, results in a credit to the District, the credit amount shall be agreed upon in writing, otherwise, the request for substitution shall be deemed denied.

3.11 INTEGRATION OF WORK

3.11.1 Scope

Trade Contractor shall be responsible for cutting, fitting, or patching to complete the Work and to make all parts fit together properly. Trade Contractor shall be responsible for ensuring that

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

3.11.2 Structural Members

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

3.11.3 Subsequent Removal

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

3.12 ALLOWANCES

3.12.1 Allowances are to be included in the base bid and listed separately in the Schedule of Values and Application for Payment.

3.12.2 100% of all unused Allowances are returned to the District upon issuance of Final Payment.

3.12.3 Trade Contractor shall submit a request for allowance disbursement with all substantiating and required data. Allowances shall be disbursed without Trade Contractor overhead and any other mark-ups.

3.12.4 Use of Allowances Only as Allowed by CM and District

The Use of allowances are only as specifically authorized by the CM and District and only for the specific area of Work noted and must be approved before allowances are disbursed.

3.13 CLEANING UP

3.13.1 Trade Contractor's Responsibility to Clean Up

Trade Contractor at all times shall keep premises free from debris such as waste, dust, excess water, storm water runoffs, rubbish, and excess materials and equipment. Trade Contractor shall not leave debris under, in, or about the premises, but shall promptly remove same from the premises and dispose of it in a lawful manner. Disposal receipts or dump tickets shall be furnished to the Architect within five (5) days of request.

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

3.13.2 General Final Clean-Up

Upon completion of Work, Trade Contractor shall employ experience workers or professional cleaners for final cleaning. Trade Contractor shall clean each surface to the condition expected in a normal, commercial, building cleaning and maintenance program including, but not limited to, the performance of the following:

- a. Clean interior and exterior of buildings, including fixtures, equipment, walls, floors, ceilings, roofs, window sills and ledges, horizontal projections, and any areas where debris has collected, so surfaces are free from foreign material or discoloration;
- b. Clean the Project site. The grounds should be cleared of any Trade Contractor equipment, raked clean of debris and trash removed. Sweep paved areas broom clean;
- c. Repair or replace any damaged materials. Replace any chipped or broken glass;
- d. Remove any and all stains;
- e. Remove labels that aren't permanent labels;
- f. Clean and polish all glass, plumbing fixtures, equipment, finish hardware and similar finish surfaces. Remove any glazing compounds;
- g. Remove temporary utilities, fencing, barricades, planking, sanitary facilities and similar temporary facilities from Site;
- h. Remove temporary film that remains on any hardware, doors or other surfaces; and
- i. Seal the bottom and tops of all doors.

3.13.3 Special Clean-Up.

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

- a. Remove putty stains from glazing, then wash and polish glazing;
- b. Remove marks, stains, fingerprints and other soil or dirt from painted, stained or decorated work;
- c. Remove temporary protection and clean and polish floors and waxed surfaces;

- d. Clean and polish hardware and plumbing trim; remove stains, dust, dirt, plaster and paint;
- e. Wipe surfaces of mechanical and electrical equipment;
- f. Remove spots, soil, plaster and paint from tile work, and wash tile;
- g. Clean all fixtures and equipment, remove excess lubrication, clean light fixtures and lamps, polish metal surfaces;
- h. Vacuum-clean carpeted surfaces; and
- i. Remove debris from roofs, down spout and drainage system.

3.13.4 Failure to Cleanup

If the Trade Contractor fails to clean as provided in the Contract Documents, the District may do so and the cost thereof shall be the responsibility of the Trade Contractor pursuant to Article 2.2 and seek a Deductive Change Order.

3.14 ACCESS TO WORK

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

3.14.1 Special Inspections, Inspections or Tests Out of State, Out of Country or Remote from Project

If Trade Contractor has a Subcontractor or supplier that requires in plant or special inspections or inspections or tests that are out of the country, out of the state, or a distance of more than 200 miles from the Project site, the Special Inspector or Inspector shall be provided access so the special inspection or inspection may occur in the remote location. In some cases, the DSA Inspector may also require access in addition to Special Inspectors and individuals performing tests. Inspections/tests shall occur during normal work hours. (See also Article 4.3.6)

3.15 ROYALTIES AND PATENTS

3.15.1 Payment and Indemnity for Infringement

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

3.15.2 Review

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

3.16 INDEMNIFICATION

3.16.1 Trade Contractor

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

Trade Contractor's and Subcontractors' obligation to defend, indemnify and hold harmless the District, Architect, CM, Inspector, the State of California and their officers, employees, agents and independent contractors hereunder shall include, without limitation, any and all claims, damages, and costs for the following: (1) any damages or injury to or death of any person, and damage or injury to, loss (including theft), or loss of use of, any property; (2) breach of any warranty, express or implied; (3) failure of Trade Contractor or Subcontractors to comply with any applicable governmental law, rule, regulation, or other requirement; (4) products installed in or used in connection with the Work; and (5) any claims of violation of the Americans with Disabilities Act ("ADA").

3.17 SUBMISSION OF DAILY REPORTS

3.17.1 General

By 10:00 a.m. on the following business day, Trade Contractor shall submit a Daily Report to the Inspector and copy the Architect for the previous day's Work. The original Daily Report is to be provided to the CM and copies sent to the Architect and the Inspector. Daily Reports shall be prepared on forms approved by the District, together with applicable delivery tickets, listing all labor, materials, and equipment involved for that day. The District reserves the right to note inconsistencies or inaccuracies in the Daily Reports. In such cases, pertinent notes shall be entered by each party to explain points which cannot be resolved that day. Each party shall retain a signed copy of the report. Reports by Subcontractors or others shall be submitted through the Trade Contractor.

3.17.2 Labor

The Daily Report shall show names of workers, classifications, hours worked and hourly rate. The locations where work occurred shall also be identified in the Daily Report. Project superintendent expenses are not allowed.

3.17.3 Materials

The Daily Report shall describe and list quantities of materials used and unit costs.

3.17.4 Equipment

The Daily Report required by Article 3.16.1 shall show type of equipment, size, identification number, and hours of operation, including loading and transportation, if applicable, and hourly/daily cost. Move-on and move-off fees shall be noted.

3.17.5 Other Services and Expenditures

Other services and expenditures shall be described in the Daily Report in detail as the District requires.

3.17.6 Failure to Submit Daily Report

If Trade Contractor does not submit its Daily Report by 10 am the next business day, the Inspector of Record shall prepare a Daily Report addressing each of the above items. The cost for the Inspector's services to prepare the Daily Report shall be addressed through a Deductive Change Order under Article 7.7.4

3.18 AS-BUILT DRAWINGS AND ANNOTATED SPECIFICATIONS

Throughout the duration of the Project, Trade Contractor shall maintain on a current basis an accurate and complete set of As-Built Drawings (and Annotated Specifications) clearly showing all changes, revisions to Specifications and substitutions during construction, including, without limitation, field changes and the final location of all electrical and mechanical equipment, utility lines, ducts, outlets, structural members, walls, partitions, and other significant features. In case a Specification allows Trade Contractor to elect one of several brands, makes, or types of material or equipment, the annotations shall show which of the allowable items the Trade Contractor has furnished. Trade Contractor will update the As-Built Drawings and Annotated Specifications as often as necessary to keep them current, but no less often than weekly.

Trade Contractor shall update As-Built Drawings with complete information on an area of Work at or near the time when the Work is being performed and prior to any DSA 152 sign off and prior to any Work being covered.

The As-Built Drawings and Annotated Specifications shall be kept at the Site and available for review and inspection by the District and the Architect. Failure to maintain and update the As-Built Drawings is a basis to withhold Progress Payments pursuant to Article 9.6.

3.18.1 Upon Beneficial Occupancy

Trade Contractor shall obtain and pay for reproducible Plans upon Beneficial Occupancy. Trade Contractor shall deliver Plans to CM.

3.18.2 As-Builts at Completion of Work

Upon completion of the Work and prior to and as a condition precedent to Application for Retention Payment, Trade Contractor will provide one neatly prepared and complete set of As-Built Drawings and Annotated Specifications to the District. Trade Contractor shall certify the As-Builts as a complete and accurate reflection of the actual construction conditions of the Work by affixing a stamp indicating the Drawings are As-Builts and certifying accuracy on the final set of As-Builts. Failure to

deliver a complete As-Built Drawings and Annotated Specifications may result in significant withholdings to ensure Work is properly documented. (See Article 9.9.1)

3.18.3 Log of Control and Survey Documentation

Trade Contractor shall complete and maintain an accurate log or all control and survey documentation for the Project as the Work progresses. All reference and control points shall be recorded on the As-Built Drawings. The basis of elevations shall be one of the established benchmarks that must be maintained on the As-Built.

3.18.4 Record Coordinates for Key Items

Trade Contractor shall record, by coordinates, all utilities on-site with top of pipe elevations, major grade and alignment changes, rim, grate or top of curb and flow line elevations of all drainage structures and sewer manholes. Trade Contractor shall update record information at or near the time when work is occurring in an area and prior to DSA 152 sign off on any category of Work and prior to covering the Work.

3.18.5 BIM As-Built Drawings

If BIM is utilized for the Project, then an electronic version of such As-Built Drawings and Annotated Specifications will be delivered to District (in an acceptable format to District).

3.19 EQUIPMENT MANUALS

Trade Contractor shall obtain and furnish three (3) complete sets of manuals containing the manufacturers' instructions for maintenance and operation of each item of equipment and apparatus furnished under the Contract Documents and any additional data specifically requested under the various sections of the Specifications for each division of the Work. The manuals shall be arranged in logical, sequential order, labeled, indexed, and placed in three-ring binders. At the completion of its Work, the Trade Contractor shall certify, by endorsement thereon, that each of the manuals is complete, accurate, and covers all of its Work. Prior to submittal of Trade Contractor's Application for Retention Payment, and as a further condition to its approval by the Architect, each Trade Contractor shall deliver the manuals, arranged in logical, sequential order, labeled, indexed, endorsed, and placed in three-ring binders, to CM, who will review these manuals with Architect for all divisions of the Work for completeness, and submit them to the District.

3.20 DIR REGISTRATION

Strict compliance with all DIR registration requirements in accordance with Labor Code sections 1725.5 and 1771.1 is a material obligation of the Trade Contractor and all of its subcontractors (of any tier) under the Contract Documents. The foregoing includes, without limitation, compliance with DIR registration requirements at all times during performance of the Work by the Trade Contractor and all of its subcontractors of any tier. The failure of the Trade Contractor and all subcontractors of any tier to be properly registered with DIR at all times during performance of the Work is a material breach of the Contract and subject to termination for cause.

An affirmative and ongoing obligation of the Trade Contractor under the Contract Documents is the verification that all subcontractors of any tier are at all times during performance of the Work are in full and strict compliance with the DIR registration requirements. The Trade Contractor shall not permit or allow any subcontractor of any tier to perform any Work without the Trade Contractor's verification

that all subcontractors are in full and strict compliance with the DIR registration requirements. Any subcontractors of any tier not properly registered with DIR shall be substituted in accordance with Labor Code section 1771.1. Trade Contractor or its subcontractors of any tier shall not be entitled to any additional costs or time arising from or in any way related to compliance with the DIR registration requirements.

ARTICLE 4
ADMINISTRATION OF THE CONTRACT AND CLAIMS

4.1 ARCHITECT

4.1.1 Replacement of Architect

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

4.2 ARCHITECT'S ADMINISTRATION OF THE CONTRACT

4.2.1 Status

Pursuant to Titles 24 of the California Code of Regulations and as required pursuant to the Field Act, Education Code 17280 et seq., the Architect will provide administration of the Contract Documents and the Work, and will be the District's representative during construction, as well as during the one (1) year period following the commencement of any warranties. The Architect will have authority to act on behalf of the District only to the extent provided in the Contract Documents.

4.2.2 Site Visits

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

4.2.3 Limitations of Construction Responsibility

The Design Team shall not have control over, charge of, or be responsible for construction means, methods, techniques, schedules, sequences or procedures, fabrication, procurement, shipment, delivery, receipt, installation, or for safety precautions and programs in connection with the Work, since these are solely the Trade Contractor's responsibility under the Contract Documents. The Design Team shall not be responsible for Trade Contractor's, Trade Contractor's Subcontractors', material or equipment suppliers', or any other person's schedules or failure to carry out the Work in accordance with the Contract Documents. The Design Team shall not have control over or charge of acts or omissions of Trade Contractor, Trade Contractor's Subcontractors, their agents or employees, or any other persons or entities performing or supplying portions of the Work. Trade Contractor shall not be relieved of obligations to perform the Work in accordance with the Contract Documents either by activities or duties of the Design Team in the Design Team's administration of the Contract Documents, or by tests, inspections, or approvals required or performed by persons other than Trade Contractor.

4.2.4 Communications Facilitating Contract Administration

All communication shall be through the CM (unless otherwise directed) with copies to the District, Architect and Inspector. Where direct communication is necessary between the District and Trade Contractor, the District's communication shall be through the District's Representative and/or the CM. Trade Contractor shall not rely upon any communications from the District that is not from the District's Representative. Communications by and with the Architect's consultants shall be through the CM and through Architect. Communications by and with Trade Contractor's Subcontractors and material

or equipment suppliers shall be through Trade Contractor. The CM shall be the main point of contact for communication of information. Copies should be sent to the Architect, District Representative and Inspector.

4.2.5 Payment Applications

The Architect will review and make recommendations to the District regarding the amounts due Trade Contractor on the Certificates for Payment pursuant to Article 9.3.4 and subject to the Inspector's and CM's review, and Architect's observation. This review of Payment Applications is sometimes called a "Pencil Draft." Return of a Pencil Draft shall constitute the District's dispute of the Payment Application that has been submitted. Trade Contractor shall promptly respond to Pencil Drafts or Trade Contractor's Payment Applications may be delayed. Trade Contractor's failure to promptly respond to a Pencil Draft shall qualify as a delay in the Prompt Payment of a Request for Payment or Request for Retention.

4.2.6 Rejection of Work

In addition to the rights, duties, and obligations of the Inspector under this Article, the Design Team may reject Work which does not conform to the Contract Documents. Whenever the Architect considers it necessary or advisable to achieve the intent of the Contract Documents, the Architect (and/or CM) may recommend to the District that the District require additional inspection or testing of the Work in accordance with Article 13.5, whether or not such Work is Fabricated, installed, or completed. District may have Non-conforming Work removed and replaced pursuant to Article 9.7. However, neither this authority of the Architect (or CM) nor a decision made in good faith either to exercise or not to exercise such authority shall create a duty or responsibility of the Architect (or CM) to Trade Contractor, Subcontractors, material and equipment suppliers, their agents or employees, or other persons performing portions of the Work.

Trade Contractor shall, without charge, replace or correct Work found by the District to not be in conformance to Contract requirements. Trade Contractor shall promptly segregate and remove rejected materials from the Project site.

This section is in addition to and separate from the legal duties associated with a Notice of Non-Compliance and the remedies associated with a Notice of Non-Compliance which are addressed at Article 7.1.2.

4.2.7 Warranties upon Completion

The Architect (and where applicable CM), in conjunction with the Inspector will conduct field reviews of the Work to determine the date of Substantial Completion and of Final Completion, shall receive and forward to the District for the District's review written warranties and related documents required by the Contract and assembled by Trade Contractor, and will issue a final Certificate for Payment when the Architect believes the Work has been completed in compliance with the requirements of the Contract Documents (See Article 9.11 for Close-Out). The handling by the Architect (or where applicable CM) of such warranties, maintenance manuals, or similar documents shall not diminish or transfer to the Architect any responsibilities or liabilities required by the Contract Documents of the Trade Contractor or other entities, parties, or persons performing or supplying the Work.

On some Projects, the District will take a phased occupancy of the Project. In those cases, the District may commence the running of warranties on the buildings, or phases that are accepted after Punch List is completed and the District has accepted Completion of the separate phase. A separate

Notice of Completion may be filed for the separate building or phase of work and warranties shall commence for the separate phase only to the extent that warranties do not require coordination or connection to other buildings or other parts of the site and only if the warranted item is completed to its entirety in the segregated building or phased area.

If written warranties are not provided at the time the Punch List is nearing completion, Architect (with recommendations from the CM and Inspector) shall determine the dollar value of the warranties and shall make recommendation for withholdings necessary to effectuate the transfer of such warranties to the District for future use as part of the Punch List for the Project pursuant to Article 9.6.

Warranties are not commenced through utilizing of equipment for testing and operation as necessary to acclimate buildings or where necessary to test systems.

4.2.8 Interpretation

The Architect will interpret and decide matters concerning performance and requirements of the Contract Documents. Architect shall make clarifications as necessary to interpret the Contract Documents.

4.3 PROJECT INSPECTOR

4.3.1 General

One or more Project Inspectors employed by the District and approved by the Division of the State Architect will be assigned to the Work in accordance with the requirements of Title 24 of the California Code of Regulations. The Inspector(s) duties are as specifically defined in Title 24 Section 4-333 and 4-342 and in DSA IR A-8.

4.3.2 Inspector's Duties and DSA Noted Timelines for Inspection

All Work shall be under the observation of the Inspector. Trade Contractor, with the assistance of the CM, shall establish a protocol for requesting inspection with Inspector so as to not delay the Work and provide adequate time for the Inspector to perform inspection. This protocol is to be established as part of the Initial Trade Contactor Coordination Meetings. If such a protocol is not established ahead of time, Inspector may utilize the time criteria set by Title 24 of 48 hours in advance of submitting form DSA 156 for each new area. The Inspector shall have free access to any or all parts of the Work at any time. Trade Contractor shall furnish the Inspector such information as may be necessary to keep the Inspector fully informed regarding progress and manner of Work and character of materials. Such observations shall not, in any way, relieve Trade Contractor from responsibility for full compliance with all terms and conditions of the Contract, or be construed to lessen to any degree the Trade Contractor's responsibility for providing efficient and capable superintendence. The Inspector is not authorized to make changes in the Drawings or Specifications nor shall the Inspector's approval of the Work and methods relieve Trade Contractor of responsibility for the correction of subsequently discovered defects, or from its obligation to comply with the Contract Documents.

Inspector shall electronically post DSA required documents on the DSA electronic posting website. It is Trade Contractor's responsibility to determine the status of posting and determine if all the criteria for sign off of a category of Work on the Project Inspection Card (Form DSA 152) as defined more thoroughly in the most current version of the DSA 152 manual posted on the DSA website.

Inspector may collaborate with Trade Contractor about approval of areas that may be constructed and approved incrementally under the DSA 152 card pursuant to the guidelines of PR-13 at Article 1.17. Inspector shall work with Trade Contractor to present incremental approval proposals to DSA.

4.3.3 Inspector's Authority to Reject or Stop Work

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

4.3.4 Inspector's Facilities

If required under Trade Contractor's scope and bid package, within seven (7) days after the notice to proceed, the Trade Contractor shall provide the Inspector with the temporary facilities as required. More specific requirements for the Inspector facilities may be further described under Division 1 of the Specifications.

4.3.5 Testing Times

The District will provide inspection and testing at its cost during the normal eight (8) hour day Monday through Friday (except holidays). Work by Trade Contractor outside of the normal eight (8) hour day shall constitute an authorization from Trade Contractor to the District to provide inspection and testing as required outside of the normal eight (8) hour day. Trade Contractor shall provide adequate time for inspections so as to not delay the Work. An advanced timing protocol may be established pursuant to Article 4.3.2. If the Trade Contractor is behind Schedule then it is incumbent on the Trade Contractor to provide advance forecast through look ahead of the anticipated date for inspection so the Inspector may plan their activities so as to not delay the Project. Trade Contractor shall reimburse District for any additional costs associated with inspection and testing (including re-inspection and re-testing) outside the normal eight-hour day and for any retests caused by the Trade Contractor.

It is Trade Contractor's responsibility to request special inspections with sufficient time so all testing may be timely completed and posted so work may proceed and the Inspector's signature is attached to the Project Inspection Card (Form 152). Specifically, timely request for special inspection under the DSA Verified Report Forms 291 (laboratory), DSA Verified Report Form 292 (Special Inspection), and DSA Verified Report 293 (geotechnical) since DSA requirements under PR 13-01 specifically gives the Special Inspections 14 days to post to the DSA website. Failure to plan and pay (if applicable) for quicker delivery of Special Inspections may be counted as Float, but is not considered Governmental Delay Float under Article 8.1.4.

4.3.6 Special Inspections, Inspections or Tests Out of State, Out of Country or Remote from Project

If Trade Contractor has a Subcontractor or supplier that requires in plant or special inspections or inspections or tests that are out of the country, out of the state or a distance of more than 200 miles from the Project Site, the District shall provide the Special Inspector, Inspector or individual performing tests time for inspection and testing during normal work hours. Trade Contractor, however, is

responsible for the cost of travel, housing, food, out of area premiums that may be in the Inspector/Testing Agreement with District, or other expenses necessary to ensure proper inspection, special inspection or testing is provided by a DSA Certified Inspector, Special Inspector, or individual performing tests. In some cases all three (DSA Inspector, Special Inspector, and Tester) may be required. In addition, if the DSA Certified Inspector, Special Inspector, or individual performing test has contractual travel clauses or special rates for out of town inspection, Trade Contractor is responsible for all costs associated with the contractual travel costs in addition to all other costs. Arrangements for inspection and/or testing shall be made far enough in advance so as to not delay the Work.

4.4 STOP WORK ORDER

DSA may issue a Stop Work Order, or an Order to Comply, when either (1) the Work proceeds without DSA approval; (2) the Work proceeds without a DSA Inspector of Record, or (3) where DSA determines that the Work is not being performed in accordance with applicable rules and regulations, and would compromise the structural integrity of the Project or would endanger lives. If a Stop Work Order is issued, the Work in the affected area shall cease until DSA withdraws the Stop Work Order. Pursuant to Education Code Section 17307.5(b) and Education Code Section 81133.5, the District shall not be held liable in any action filed against the District for any delays caused by compliance with the Stop Work Order, except to the extent that an error or omission by the District is the basis for the issuance of the Stop Work Order.

Examples of Stop Work Orders that may be issued by DSA include DSA Bulletin 07-04 and Policy 10-01, the installation of automatic fire sprinkler systems without approved Plans, covering Work that has not been approved by Inspector on DSA Project Inspection Card (Form 152).

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

If at any time prior to the completion of the requirements under the Contract Documents, the District is required to provide or secure additional professional services (including CM, Inspection, Architect, Engineering and Special Consultant Services) for any reason by any act of the Trade Contractor, the District may seek a Deductive Change Order for any costs incurred for any such additional services, which costs shall be deducted from the next progress payment. A Deductive Change Order shall be independent from any other District remedies and shall not be considered a waiver of any District rights or remedies. If payments then or thereafter due to the Trade Contractor are not sufficient to cover such amounts, the Trade Contractor shall pay the difference to the District. Additional services shall include, but shall not be limited to, the following:

- a. Services made necessary by the default of the Trade Contractor (Article 14 or Article 2.2).
- b. Services made necessary due to the defects or deficiencies in the Work of the Trade Contractor (Article 2.2 and Article 9.6).
- c. Spurious or frivolous RFI's issued that do not conform to the requirements of Article 7.4. Issuance of the same RFI after receiving an answer from the Architect or Engineer
- d. Review of Schedules that are provided by Trade Contractor that do not Conform with the Requirements of Article 8.

- e. Preparation of a CCD or ICD to correct a Trade Contractor Deficiency, or Trade Contractor Caused Notice of Non-Compliance (Article 7.3).
- f. Review of Incomplete Shop Drawings or Submittals, including the submission of Piecemeal Shop Drawings or Submittals unless piecemeal Submittals are specifically agreed upon by District (See Article 3.9)
- g. Services required by failure of the Trade Contractor to perform according to any provision of the Contract Documents.
- h. Services in connection with evaluating substitutions of products, materials, equipment, Subcontractors' proposed by the Trade Contractor, and making subsequent revisions to Drawings, Specifications, obtaining DSA approvals, DSA costs for review of CCD's, other governmental agency review costs, and providing other documentation required (except for the situation where the specified item is no longer manufactured or available). (See Article 3.10)
- i. Services for evaluating and processing Claims or Disputes submitted by the Trade Contractor in connection with the Work outside the established Change Order process.
- j. Services required by the failure of the Trade Contractor to prosecute the Work in a timely manner in compliance within the specified time of completion.
- k. Services in conjunction with the testing, adjusting, balancing and start-up of equipment other than the normal amount customarily associated for the type of Work involved.
- l. Services in conjunction with more than one (1) re-review of Submittals of Shop Drawings, Product Data, samples, RFI's etc.

4.6 DISPUTES AND CLAIMS

4.6.1 Decision of Architect

“Disputes” or “Claims” as defined in Article 4.6.9.1 between District and Trade Contractor involving money or time, including those alleging an error or omission by the Architect shall be referred initially to the Architect for action as provided in Article 4.6.2 within ten (10) days after Trade Contractor’s Article 7 request for Change is denied. The CM shall receive the Dispute and may review and also assemble opinions and documents to assist the Architect. A decision by the Architect, as provided in Article 4.6.5, shall be required as a condition precedent to proceeding with remedies set forth in Article 4.6.9 as to all such matters arising prior to the date Retention Payment Application is due, regardless of whether such matters relate to execution and progress of the Work, or the extent to which the Work has reached Final Completion.

The condition precedent of an Architect decision shall be waived if: (1) the position of Architect is vacant; (2) the Architect has failed to take action required under Article 4.6.5 within the time periods required therein; or (3) the Dispute or Claim relates to a stop notice claim not arising from any extra Change Order or Immediate Change Directive for which approval has not been provided.

4.6.2 Architect's Review

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

4.6.2.1 *Architectural Immunity.* Architect review of Disputes and Claims shall be impartial and meant to resolve Disputes and Claims. Pursuant to the case, Huber, Hunt & Nichols, Inc. v. Moore (1977) 67 Cal.App.3d 278, the Architect is provided a quasi-judicial immunity for interpreting and deciding Disputes and Claims between the District and Trade Contractor.

4.6.3 Documentation if Resolved

If a Dispute has been resolved, the Architect (and/or CM) will prepare a Change Order or obtain appropriate documentation to document the terms for Board approval.

4.6.4 Actions if Not Resolved

If a Dispute has not been resolved and all documentation requested pursuant to Article 4.6.2 has been provided, the Trade Contractor shall, within ten (10) days after the Architect's initial response, assemble all the documents involved in the Dispute including copies of all back-up documentation of costs and the basis for the Dispute and take one or more of the following actions: (1) modify the initial Dispute; (2) notify the Architect that the initial Dispute stands; or (3) supplement with additional supporting data and re-submit to the Architect under Article 4.6.2.

4.6.5 Architect's Written Decision

If a Dispute has not been resolved after consideration of the foregoing and of other evidence presented by the parties or requested by the Architect, the Architect (or Architect through CM) shall provide a written decision twenty (20) days after compliance with Article 4.6.4. Upon expiration of such time period, the Architect (or Architect through CM) will render to the parties its written decision relative to the Dispute, including any change in the Contract Sum or Contract Time or both. The Architect may also request reasonable additional time to complete Architect's written decision.

If the resolution of the Dispute by the Architect is not satisfactory to the Trade Contractor and copies of all back-up documentation of costs and the basis for the Dispute is fully articulated in a package of material that is complete, the Trade Contractor may then submit a Claim to the District under Article 4.6.9

4.6.6 Continuing Contract Performance

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

4.6.6.1 *District's Option to Submit Individual Disputes to Arbitration during Claims and Disputes Process.* At the District's sole option, in order to more efficiently resolve Claims during the Project and prior to the completion of the Claims Process, pursuant to Government Code Section 9201, the District may submit individual Disputes or Claims for binding arbitration and Trade Contractor agrees to the resolution of for each individual Dispute or Claim by an Arbitrator, including resolution of time and delays. If binding arbitration is utilized for individual Disputes or Claims, such resolution is full and final as to that particular Dispute or Claim. THIS INDIVIDUAL DISPUTE ARBITRATION PROCESS IS NOT AN ARBITRATION CLAUSE AND SHALL NOT BE CONSTRUED AS AN AGREEMENT TO ARBITRATE. THIS INDIVIDUAL DISPUTES ARBITRATION PROCESS IS FOR THE SOLE PURPOSE OF STREAMLINING AND RESOLVING DISPUTES OR CLAIMS DURING CONSTRUCTION AND SHALL BE REQUESTED ON SPECIFIC INDIVIDUAL ITEMS BY THE DISTRICT PRIOR TO RETENTION PAYMENT (EVEN IF THERE ARE DEDUCTIONS MADE FROM RETENTION PAYMENT) WHICH REPRESENTS THE FINAL COMPLETION OF THE PROJECT.

- a. If there is no Retention remaining on the Project, individual Disputes initiated prior to Project Final Completion shall continue until a final disposition of the Arbitration or resolution of the individual Claim or Dispute.
- b. No Tolling. The Arbitration process shall not toll the Disputes or Claims process under Article 4.6 or the requirement to submit Claims to Court under Article 4.6.9.4.

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

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

- a. Immediately upon discovery, Trade Contractor shall promptly, and before the following conditions are disturbed, notify the District, by telephone and in writing, of the condition except:
 1. If such condition is a hazardous waste condition, Trade Contractor's bid includes removal or disposal of hazardous substances. Material that the Trade Contractor believes may be a material that is hazardous waste, as defined in Section 25117 of the Health and Safety Code, is required to be removed to a Class I, Class II, or Class III disposal site in accordance with the provisions of existing law. In such case, the notice bulletin procedures of Article 7 apply.
 2. Subsurface or latent physical conditions at the Site differing from those indicated in the Drawings, Specifications, Soils Report, and from Trade Contractor's own investigation under Article 2.1.
 3. Unknown physical conditions at the Site of any unusual nature, different materially from those ordinarily encountered and generally recognized as inherent in Work of the character provided for in the Contract.
- b. The District shall investigate the conditions, and if District finds that the conditions do materially so differ, do involve hazardous waste, and cause a

decrease or increase in Trade Contractor's cost of, or the time required for, performance of any part of the Work shall issue a Change Order or Construction Change Document under the procedures described in the Contract.

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

4.6.8 Dispute Concerning Extension of Time.

If Trade Contractor and District cannot agree upon an extension of time, whether compensable or not, then Trade Contractor must have first completed the procedures set forth in Article 8.4. Upon completion of the procedures set forth under Article 8.4, Trade Contractor must then comply with the requirements in this Article including those set forth under Article 4.6.9.

4.6.9 Claims Procedures

Pursuant to the remedies under Public Contract Code Section 9201 and Government Code Section 930.2, Trade Contractor, through execution of this Agreement, also agrees to comply with the Claims requirements of Article 4.6 to quickly and efficiently resolve disputes. Further, to provide a level of accuracy to the records submitted, the District shall have the right to audit books and records pursuant to Article 13.11 based on the actual costs incurred and to reduce the uncertainty in resolving disputes with limited information.

4.6.9.1 *Procedure Applicable to All Claims*

- a. Definition of Claim: A "Claim" is where a Dispute between the parties rises to the level where backup documentation is assembled and provided to the District as a separate demand by Trade Contractor for: (1) a time extension, including, without limitation, for relief from damages or penalties for delay assessed by the District under the Contract; (2) payment by the District of money or damages arising from Work done by or on behalf of Trade Contractor pursuant to the Contract and payment for which is not otherwise expressly provided for or to which the Trade Contractor is not otherwise entitled to; or (3) an amount of payment disputed by the District. If the Claim is for damages associated with a DSA Stop Work Order, Trade Contractor shall not be entitled to a request for Compensation, but shall be entitled to utilize Governmental Delay Float (See Article 8.1.5.1.)
- b. Filing Claim Is Not Basis to Discontinue Work: Trade Contractor shall promptly comply with Work under the Contract or Work requested by the District even though a written Claim has been filed. Trade Contractor and the District shall make good faith efforts to resolve any and all Claims that may arise during the performance of the Work covered by this Contract.

- c. Claim Notification: Trade Contractor shall within seven (7) calendar days after the written decision of the Architect, or if the time period for Architect’s decision has passed under Article 4.6.1, submit a notification in writing sent by registered mail or certified mail with return receipt requested, with the District (and the District’s CM) stating clearly the basis for the Claim and including all relevant and required documents. If the notification is not submitted within seven (7) days after the written decision of the Architect or the passage of time under Article 4.6.1, Trade Contractor shall be deemed to have waived all right to assert the Claim, and the Claim shall be denied. Claims submitted after the Retention Payment date shall also be considered null and void by the District. All Claims shall be reviewed pursuant to Article 4.6.1 through 4.6.5.

The Formal Notification of Claim must be presented as follows:

- (1) The term “Claim” must be at the top of the page in no smaller than 20 point writing.
- (2) All documentation submitted pursuant to Article 4.6 to the Architect shall be submitted with the “Claim.”
- (3) A stack of documents, copy of all Project documents, or the submission of random documents shall not constitute an adequate reference to supporting documentation.
- (4) Any additional or supporting documentation that Trade Contractor believes is relevant should be submitted at this time.

- d. Reasonable Documents to Support Claim: The Trade Contractor shall furnish reasonable documentation to support the Claim. Trade Contractor shall provide all written detailed documentation which supports the Claim, including but not limited to: arguments, justifications, cost, estimates, Schedule analysis and detailed documentation. The format of the required reasonable documentation to support the Claim shall include, without limitation:

1. Cover letter.
2. Summary of factual basis of Claim and amount of Claim.
3. Summary of the basis of the Claim, including the specific clause and section under the Contract under which the Claim is made.
4. Documents relating to the Claim, including:
 - a. Specifications sections in question.
 - b. Relevant portions of the Drawings
 - c. Applicable Clarifications (RFI’s)
 - d. Other relevant information, including responses that were received.
 - e. Trade Contractor Analysis of Claim merit.

- (a) Trade Contractor's analysis of any Subcontractor vendor Claims that are being passed through.
 - (b) Any analysis performed by outside consultants
 - (c) Any legal analysis that Trade Contractor deems relevant
- f. Break down of all costs associated with the Claim.
- g. For Claims relating to time extensions, an analysis and supporting documentation evidencing any effect upon the critical path in conformance with the requirements of Article 8.4 chronology of events and related correspondence.
- i. Applicable Daily Reports and logs.
 - (a) If the Daily Reports or Logs are not available, lost or destroyed, there shall be a presumption that the lost documentation was unfavorable to Trade Contractor. See California Civil Jury Instruction 204.
- j. For Claims involving overhead, cost escalation, acceleration, disruption or increased costs, a full version of job costs reports organized by category of work or Schedule of Values with budget information tracked against actual costs. Any and all supporting back-up data, including the original bid (and associated original unaltered metadata).
 - (a) The metadata and bid information shall be provided confidentially and subject to a protective order to prevent dissemination to other contractors or to the public. However, the bid documentation should remain intact and available for review and inspection in case of this type of increased cost Claim.
 - (b) This data on the bid shall be made available to any District attorneys or experts and shall also be utilized as evidence for any legal proceedings.
 - (c) If the bid documentation is not available, lost or destroyed, there shall be a presumption that the lost bid documentation was unfavorable to Trade Contractor. See California Civil Jury Instruction 204.
- e. Certification: Trade Contractor (and Subcontractors, if applicable) shall submit with the Claim a certification under penalty of perjury:
 - 1. That Trade Contractor has reviewed the Claim and that such Claim is made in good faith;
 - 2. Supporting data are accurate and complete to the best of Trade Contractor's knowledge and belief;

3. The amount requested accurately reflects the amount of compensation for which Trade Contractor believes the District is liable.
4. That Trade Contractor is familiar with Government Code Sections 12650 et seq. and Penal Code Section 72 and that false claims can lead to substantial fines and/or imprisonment.
- f. Signature of Certification: If Trade Contractor is not an individual, the certification shall be executed by an officer or general partner of Trade Contractor having overall responsibility for the conduct of Trade Contractor's affairs.
- g. Upon receipt of a Claim and all supporting documents as required above, the District shall conduct a reasonable review of the Claim and, within a period not to exceed 45 days, shall provide the Trade Contractor a written statement identifying what portion of the Claim is disputed and what portion is undisputed. Upon receipt of a Claim, the District and Trade Contractor may, by mutual agreement, extend the time period provided in this paragraph.
- h. If the District needs approval from its governing Board to provide the Trade Contractor a written statement identifying the disputed portion and the undisputed portion of the Claim, and the governing Board does not meet within the 45 days or within the mutually agreed to extension of time following receipt of a Claim sent by registered mail or certified mail, return receipt requested, the District shall have up to three days following the next duly publicly noticed meeting of the governing Board after the 45-day period, or extension, expires to provide the Trade Contractor a written statement identifying the disputed portion and the undisputed portion.
- i. Any payment due on an undisputed portion of the Claim shall be processed and made within 60 days after the District issues its written statement. If the District fails to issue a written statement, paragraph o below shall apply.
- j. If the Trade Contractor disputes the District's written response, or if the District fails to respond to a Claim issued pursuant to this Article 4.6.9 within the time prescribed, the Trade Contractor may demand in writing an informal conference to meet and confer for settlement of the issues in dispute. Upon receipt of a demand in writing sent by registered mail or certified mail, return receipt requested, the District shall schedule a meet and confer conference within 30 days for settlement of the Claim.
- k. Within 10 business days following the conclusion of the meet and confer conference, if the Claim or any portion of the Claim remains in dispute, the District shall provide the Trade Contractor a written statement identifying the portion of the Claim that remains in dispute and the portion that is undisputed. Any payment due on an undisputed portion of the Claim shall be processed and made within 60 days after

the District issues its written statement. Any disputed portion of the Claim, as identified by the Trade Contractor in writing, shall be submitted to nonbinding mediation, with the District and the Trade Contractor sharing the associated costs equally. The District and Trade Contractor shall mutually agree to a mediator within 10 business days after the disputed portion of the Claim has been identified in writing. If the parties cannot agree upon a mediator, each party shall select a mediator and those mediators shall select a qualified neutral third party to mediate with regard to the disputed portion of the Claim. Each party shall bear the fees and costs charged by its respective mediator in connection with the selection of the neutral mediator. If mediation is unsuccessful, the parts of the Claim remaining in dispute shall be subject to applicable procedures in Article 4.6.9.4.

- l. For purposes of this Article 4.6.9, mediation includes any nonbinding process, including, but not limited to, neutral evaluation or a dispute review board, in which an independent third party or board assists the parties in dispute resolution through negotiation or by issuance of an evaluation. Any mediation utilized shall conform to the timeframes in this section.
- m. Unless otherwise agreed to by the District and the Trade Contractor in writing, the mediation conducted pursuant to this Article 4.6.9 shall excuse any further obligation under Section 20104.4 to mediate after litigation has been commenced.
- n. This Claims process does not preclude the District from requiring arbitration of disputes under private arbitration or the Public Works Contract Arbitration Program, if mediation under this Article 4.6.9 does not resolve the parties' Claim. This Claims process does not preclude the District from submitting individual Disputes or Claims to binding arbitration pursuant to Article 4.6.9.3 below.
- o. Failure by the District to respond to a Claim from the Trade Contractor within the time periods described in this subdivision or to otherwise meet the time requirements of this Article 4.6.9 shall result in the Claim being deemed rejected in its entirety. A Claim that is denied by reason of the District's failure to have responded to a Claim, or its failure to otherwise meet the time requirements of this Article 4.6.9, shall not constitute an adverse finding with regard to the merits of the Claim or the responsibility or qualifications of the Trade Contractor.
- p. If a subcontractor or a lower tier subcontractor lacks legal standing to assert a Claim against a District because privity of contract does not exist, the Trade Contractor may present to the District a Claim on behalf of a subcontractor or lower tier subcontractor. A subcontractor may request in writing, either on his or her own behalf or on behalf of a lower tier subcontractor, that the Trade Contractor present a Claim for work which was performed by the subcontractor or by a lower tier subcontractor on behalf of the subcontractor. The subcontractor requesting that the Claim be presented to the District shall furnish

reasonable documentation to support the Claim. Within 45 days of receipt of this written request, the Trade Contractor shall notify the subcontractor in writing as to whether the Trade Contractor presented the Claim to the District and, if the Trade Contractor did not present the Claim, provide the subcontractor with a statement of the reasons for not having done so.

- q. Upon receipt of a Claim, the parties may mutually agree to waive, in writing, mediation and proceed directly to the commencement of a civil action or binding arbitration, as applicable.
- r. The Trade Contractor's Claim shall be denied if it fails to follow the requirements of this Article.

4.6.9.2 District (through CM or District's Agent or Attorney) May Request Additional Information: Within thirty (30) days of receipt of the Claim and the information under this Article, the District may request in writing any additional documentation supporting the Claim or documentation relating to defenses to the Claim which the District may assert. If additional documents are required, the time in which the Claim is evaluated may be extended by a reasonable time so the Claim and additional documents may be reviewed.

4.6.9.3 *Claims Procedures in Addition to Government Code Claim.* Nothing in the claims procedures set forth in this Article 4 of the General Conditions shall act to waive or relieve Trade Contractor from meeting the requirements set forth in Government Code Section 900 et seq.

4.6.9.4 *Binding Arbitration of Individual Claim Issues.* To expedite resolution of Claims pursuant to Public Contract Code Section 9201, at the District's sole option, the District may submit individual Claims to Arbitration prior to Retention Payment consistent with the requirements of Article 4.6.6.1.

4.6.9.5 *Resolution of Claims in Court of Competent Jurisdiction.* If Claims are not resolved under the procedure set forth and pursuant to Article 4.6.9, such Claim or controversy shall be submitted to a court in the County of the location of the Project after the Project has been completed, and not before.

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

ARTICLE 5 SUBCONTRACTORS

5.1 DEFINITIONS

5.1.1 Subcontractual Relations Bound to Same Contract Terms at Trade Contractor

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

5.1.2 Subcontractor Licenses and DIR Registration

All Subcontractors shall be properly licensed by the California State Licensing Board. All subcontractors (of any tier) performing any portion of the Work must comply with the Labor Code sections 1725.5 and 1771.1 and must be properly and currently registered with the California Department of Industrial Relations and qualified to perform public works pursuant to Labor Code section 1725.5 throughout the duration of the Project. No portion of the Work is permitted to be performed by a subcontractor of any tier unless the subcontractor is properly registered with DIR. Any subcontractors of any tier not properly registered with DIR shall be substituted in accordance with Labor Code section 1771.1.

5.1.3 Substitution of Subcontractor

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

5.1.4 Contingent Assignment of Subcontracts and Other Contracts

Each subcontract, purchase order, vendor contract or agreement for any portion of the Work is hereby assigned by Trade Contractor to the District provided that:

- a. Such assignment is effective only after Termination of this Contract with Trade Contractor by the District as provided under Article 14 and only for those subcontracts and other contracts and agreements that the District accepts by notifying the Subcontractor or Materialman (as may be applicable) in writing; and

- b. Such assignment is subject to the prior rights of the Surety(ies) obligated under the Payment Bond and Performance Bond.
- c. Trade Contractor shall include adequate provisions for this contingent assignment of subcontracts and other contracts and agreements in each such document.

**ARTICLE 6
CONSTRUCTION BY DISTRICT OR BY SEPARATE CONTRACTORS**

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

6.1.1 Separate Contracts.

6.1.1.1 Trade Contractor is fully aware that there will be other Trade Contractors working on the Project. District specifically reserves the right to let other contracts in connection with this Work. Trade Contractor shall afford other contractors reasonable opportunity for (1) introduction and storage of their materials; (2) access to the Work; and (3) execution of their work. Trade Contractor shall properly connect and coordinate its work with that of other Contractors and Trade Contractors.

6.1.1.2 If any part of Trade Contractor's Work depends on proper execution or results of any other contractor, Trade Contractor shall inspect and within seven (7) days or less, report to Architect, in writing, any defects in such work that render it unsuitable for proper execution of Trade Contractor's Work. Trade Contractor will be held accountable for damages to District for that Work which it failed to inspect or should have inspected. Trade Contractor's failure to inspect and report shall constitute its acceptance of other contractors' Work as fit and proper for reception of its Work, except as to defects which may develop in other contractors' work after execution of the other contractor's work.

6.1.1.3 To ensure proper execution of its subsequent Work, Trade Contractor shall measure and inspect Work already in place and shall at once report to the CM and Architect in writing any discrepancy between executed Work as built and the Contract Documents.

6.1.1.4 Trade Contractor shall ascertain to its own satisfaction the scope of the Project and nature of any other contracts that have been or may be awarded by District in prosecution of the Project and the potential impact of such Work on the Project Baseline Schedule or Schedule updates. Trade Contractor shall take into account coordination with other contractors and interface between Trade Contractor and other contractors work and identify these coordination and conflict possibilities in the Trade Contractor's Baseline Schedule that is submitted.

6.1.1.5 Nothing herein contained shall be interpreted as granting to Trade Contractor the exclusive occupancy at the site of Project. Trade Contractor shall not cause any unnecessary hindrance or delay to any other contractor working on the Project Site. If execution of any contract by the District is likely to cause interference with Trade Contractor's performance of this Contract, once Trade Contractor provides District timely written notice and identifies the interference that is likely to be caused or the Schedule Conflict, CM and District shall decide which contractor shall cease work temporarily and which contractor shall continue, or whether Work can be coordinated so that contractors may proceed simultaneously.

6.1.1.6 District shall not be responsible for any damages suffered or extra costs incurred by Trade Contractor resulting directly or indirectly from award or performance or attempted performance of any other contract or contracts at the Project necessary for the performance of the Project (examples include Electrical Utility Contractor, separate offsite contractor, a separate grading contractor, furniture installation etc).

**TRADE CONTRACTOR IS AWARE THAT THIS CONTRACT WILL INVOLVE
MULTIPLE TRADE CONTRACTORS WORKING TOGETHER AND THAT
THE WORK MAY BE SPLIT INTO SEVERAL PHASES BASED ON**

DOCUMENTATION PROVIDED WITH THIS BID OR DISCUSSED AT THE JOB WALK. TRADE CONTRACTOR HAS MADE ALLOWANCE FOR ANY DELAYS OR DAMAGES WHICH MAY ARISE FROM COORDINATION WITH CONTRACTORS REQUIRED FOR OTHER PHASES. IF ANY DELAYS SHOULD ARISE FROM ANOTHER CONTRACTOR WORKING ON A DIFFERENT PHASE, TRADE CONTRACTOR'S SOLE REMEDY FOR DAMAGES, INCLUDING DELAY DAMAGES, SHALL BE AGAINST THE CONTRACTOR WHO CAUSED SUCH DAMAGE AND NOT THE DISTRICT. CONTRACTOR SHALL PROVIDE ACCESS TO OTHER CONTRACTORS FOR OTHER PHASES AS NECESSARY TO PREVENT DELAYS AND DAMAGES TO OTHER CONTRACTORS WORKING ON OTHER PHASES OF CONSTRUCTION.

6.1.2 District's Right to Carry Out the Work

(See Article 2.2)

6.1.3 Designation as Contractor

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

6.1.4 District Notice to Trade Contractor of Other Contractors

The Trade Contractor shall have overall responsibility to reasonably coordinate and schedule Trade Contractor's activities with the activities of the District's forces and of each separate contractor with the Work of the Trade Contractor, who shall cooperate with them. Trade Contractor shall participate with other separate contractors and the District in reviewing their construction schedules when:

- 6.1.4.1 Notice is provided in the Contract Documents of other scope of Work,
- 6.1.4.2 In the case where there is known Work to be performed by other Contractors
- 6.1.4.3 For outside contractors hired by utilities
- 6.1.4.4 Where the Contract Document provides "Work by Others" or "By Others"
- 6.1.4.5 Where specifically noted during the Pre-Bid Conference
- 6.1.4.6 Where specifically noted in the Mandatory Job Walk
- 6.1.4.7 By CO or ICD,
- 6.1.4.8 With respect to the installation of :
 - a. Furniture,
 - b. Electronics and networking equipment,
 - c. Cabling,
 - d. Low voltage,
 - e. Off-site work,
 - f. Grading (when by a separate contractor),
 - g. Environmental remediation when excluded by the Contract Documents (i.e. asbestos, lead or other hazardous waste removal)
 - h. Deep cleaning crews,
 - i. Commissioning and testing,
 - j. Keying and re-keying,
 - k. Programming

6.1.4.9 Exception where no Coordination is Required on the Part of Trade Contractor for Turn Key Operations. If the Trade Contractor has specifically outlined a “Turn Key” or “Complete Delivery” of a final completed operational school in writing as part of the Trade Contractor Baseline Schedule.

6.1.4.10 Trade Contractor shall make any revisions to the Trade Contractor Baseline Schedule (or Schedule Update) deemed necessary after a joint review with CM and District and mutual agreement. The Project Baseline Schedule (or Schedule Update) shall then constitute the schedule to be used by Trade Contractor, separate contractors, and the District until subsequently revised. Additionally, Trade Contractor shall coordinate with CM, Architect, District, and Inspector to ensure timely and proper progress of Work.

6.2 CONSTRUCTIVE OWNERSHIP OF PROJECT SITE AND MATERIAL

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

6.3 DISTRICT’S RIGHT TO CLEAN UP

If a dispute arises among the Trade Contractor, separate contractors, and the CM and District as to the responsibility under their respective contracts for maintaining the premises and surrounding area free from waste materials and rubbish as described in Article 3.13, the District may clean up and allocate the cost among those it deems responsible.

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ARTICLE 7 CHANGES IN THE WORK

7.1 CHANGES

7.1.1 No Changes Without Authorization

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

Should any Change Order result in an increase in the Contract Price, the cost of such Change Order shall be agreed to, in writing, in advance by Trade Contractor and District and be subject to the monetary limitations set forth in Public Contract Code Section 20118.4 (Please check with the District since there are different interpretations of the limitations of Public Contract Code Section 20118.4 depending on the County the Project is located). In the event that Trade Contractor proceeds with any change in Work without first notifying District and obtaining the Architect's and District's consent to a Change Order, Trade Contractor waives any Claim of additional compensation for such additional work and Trade Contractor takes the risk that a Notice of Non-Compliance may issue, a critical path Project delay may occur, and Trade Contractor will also be responsible for the cost of preparation and DSA CCD review fees for a corrective DSA approved Construction Change Document.

TRADE CONTRACTOR UNDERSTANDS, ACKNOWLEDGES, AND AGREES THAT THE REASON FOR THIS NOTICE REQUIREMENT IS SO THAT DISTRICT MAY HAVE AN OPPORTUNITY TO ANALYZE THE WORK AND DECIDE WHETHER THE DISTRICT SHALL PROCEED WITH THE CHANGE ORDER OR ALTER THE PROJECT SO THAT SUCH CHANGE IN WORK BECOMES UNNECESSARY AND TO AVOID THE POSSIBLE DELAYS ASSOCIATED WITH THE ISSUANCE OF A NOTICE OF NON-COMPLIANCE.

7.1.2 Notices of Non-Compliance

Trade Contractor deviation or changes from approved Plans and Specifications may result in the issuance of a Notice of Non-Compliance (See DSA Form 154). Trade Contractor is specifically notified that deviations from the Plans and Specifications, whether major or minor, may result in the requirement to obtain a DSA Construction Change Document to correct the Notice of Non-Compliance. (See Article 7.3.1 for Definition of CCD). In some cases, the lack of a DSA approved CCD AND verification from the Inspector that a Notice of Non-Compliance has been corrected may result in a critical path delay to the next stage of Work on the Project. Specifically, a deviation from approved Plans and Specifications may prevent approval of the category of Work listed in the DSA 152 Project

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Inspection Card. Any delays that are caused by Trade Contractor's deviation from approved Plans and Specifications shall be Trade Contractor's responsibility.

7.1.3 Architect Authority

The Architect will have authority to order minor changes in the Work that do not involve DSA Approval not involving any adjustment in the Contract Sum, or an extension of the Contract Time.

7.2 CHANGE ORDERS ("CO")

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

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

A CO may be comprised of ICD's, Response to RFP's and COR's

7.3 CONSTRUCTION CHANGE DOCUMENT (CCD Category A, and CCD Category B) and IMMEDIATE CHANGE DIRECTIVE (ICD)

7.3.1 Definitions

7.3.1.1 *Construction Change Document (CCD)*. A Construction Change Document is a DSA term that is utilized to address changes to the DSA approved Plans and Specifications. There are two types of Construction Change Documents. (1) DSA approved CCD Category A for Work affecting structural, access or fire/ life safety of the Project which will require a DSA approval; and, (2) CCD Category B for work NOT affecting structural safety, access compliance or fire/ life safety that will not require a DSA approval (except to confirm that no Approval is required). Both CCD Category A and Category B shall be set forth in DSA Form 140 and submitted to DSA as required.

7.3.1.2 *Immediate Change Directive (ICD)*. An Immediate Change Directive is a written order to Trade Contractor prepared by the Architect and signed by the District and CM and the Architect, directing a change in the Work and stating a proposed basis for adjustment, if any, in the Contract Sum or Contract Time, or both. The District may by ICD, without invalidating the Contract, direct immediate changes in the Work within the general scope of the Contract consisting of additions, deletions, or other revisions within. If applicable, the Contract Sum and Contract Time will be adjusted accordingly.

In the case of an Immediate Change Directive being issued, Trade Contractor must commence Work immediately or delays from failure to perform the ICD shall be the responsibility of Trade Contractor and the failure to move forward with Work immediately shall also be grounds for Termination under Article 14.

An ICD does not automatically trigger an Article 7.6 Dispute or Claim. Trade Contractor must timely follow the procedures outlined at Article 7.6 and 4.6 where applicable.

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Refer to Division 1 and Supplementary General Conditions for a copy of the proposed Immediate Change Directive form.

7.3.2 Use to Direct Change

An ICD shall be used to move work forward immediately and to avoid delay. In some cases, an ICD shall be issued in the absence of agreement on the terms of a CO, COR, or RFP. A copy of an ICD form is provided in the Supplementary General Conditions and Division 1. The anticipated not to exceed price for the Work will be inserted into the ICD. In the case of an ICD issued to correct Trade Contractor Deficiencies or to correct a Trade Contractor caused Notice of Non-Compliance, the ICD may be issued with \$0 and no additional time. Contract may prepare a COR associated with the ICD pursuant to Article 7. However, Trade Contractor shall proceed with all Work required under an Approved ICD immediately upon issuance. Failure to proceed with the Work under an ICD shall be grounds for Termination for Cause under Article 14 or take over the Work under Article 2.2.

If adequate time exists, an ICD may be subject of an RFP for pricing and determination if any time that may be required. However, if an RFP is not completed, Trade Contractor shall immediately commence Work when an ICD is issued. If the RFP is incomplete, it may still be completed to be submitted for pricing purposes as long as the RFP is submitted within the timeline provided by the RFP, or within 10 days following issuance of the ICD.

7.3.3 ICD Issued Over a Notice of Non-Compliance or to Cover Work Subject to a DSA 152 Sign Off

In some cases, an ICD shall be for the purpose of proceeding with Work to keep the Project on Schedule and as an acknowledgement by the District that Trade Contractor is proceeding with Work contrary to a Notice of Non-Compliance, prior to issuance of a DSA approved CCD Category A, or to direct the covering of Work which has not yet received a DSA 152 Inspection Approval to move forward.

7.3.3.1 Trade Contractor Compliance with all Aspects of an ICD. Trade Contractor is to undertake the ICD and comply with all aspects of the Work outlined in the ICD. Inspector is to inspect the Work pursuant to the ICD. Failure to follow the ICD may result in deduction of the ICD Work under Article 2.2 or Termination of the Trade Contractor pursuant to Article 14.

7.3.3.2 Exception in the Case of DSA Issued Stop Work Order. Trade Contractor must proceed with an ICD even if a CCD has not been approved by DSA except in the case of a DSA issued Stop Work Order. If a DSA Stop Work Order is issued, Trade Contractor must stop work and wait further direction from the District.

7.3.3.3 ICD Due to Trade Contractor Deficiency or Trade Contractor Caused Notice of Non-Compliance. If an ICD is issued to correct a Trade Contractor Deficiency or a Trade Contractor caused notice of Non-Compliance, Trade Contractor specifically acknowledges responsibility for all consequential damages associated with Trade Contractor Deficiency or Trade Contractor caused Notice of Non-Compliance and all consequential damages and costs incurred to correct the deficiency under Article 4.5.

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7.4 REQUEST FOR INFORMATION (“RFI”)

7.4.1 Definition

A RFI is a written request prepared by Trade Contractor requesting the Architect to provide additional information necessary to clarify or amplify an item which Trade Contractor believes is not clearly shown or called for in the Drawings or Specifications, or to address problems which have arisen under field conditions.

7.4.1.1 A RFI shall not be used as a vehicle to generate time extensions.

7.4.1.2 Resubmission of the same or similar RFI is not acceptable. RFI’s that are similar should be addressed in Project meetings where the requestor (Trade Contractor, Subcontractor or vendor) is able to address the particular issue with the Architect or Engineer and a resolution addressed in the minutes.

7.4.1.3 A RFI response applicable to a specific area cannot be extended to other situations unless specifically addressed in writing within the RFI or in a separate RFI.

7.4.1.4 RFI’s should provide a proposed solution and should adequately describe the problem that has arisen.

7.4.2 Scope

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

7.4.3 Response Time

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

7.4.4 Costs Incurred

Trade Contractor shall be responsible for any costs incurred for professional services as more fully set forth in Article 4.5, which shall be subject to a Deductive Change Order, if an RFI requests an interpretation or decision of a matter where the information sought is equally available to the party making such request. District, at its sole discretion, shall issue a Deductive Change Order to Trade Contractor for all such professional services arising from this Article.

7.5 REQUEST FOR PROPOSAL (“RFP”)

7.5.1 Definition

A RFP is a written request prepared by the Architect (and/or CM) requesting Trade Contractor to submit to the District and the Architect an estimate of the effect of a proposed change on the

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Contract Price and (if applicable) the Contract Time. If Architect issues a Bulletin, the Changed items in the Bulletin shall be addressed as an RFP and all responses shall be prepared to a Bulletin as addressed in this Article 7.5. A form RFP is included in the Division 1 documents.

7.5.2 Scope

A RFP shall contain adequate information, including any necessary Drawings and Specifications, to enable Trade Contractor to provide the cost breakdowns required by Article 7.7. Trade Contractor shall not be entitled to any Additional Compensation for preparing a response to an RFP, whether ultimately accepted or not.

7.5.3 Response Time

Trade Contractor shall respond to an RFP within ten (10) days or the time period otherwise set forth in the RFP.

7.6 CHANGE ORDER REQUEST (“COR”)

7.6.1 Definition

A COR is a written request prepared by Trade Contractor supported by backup documentation requesting that the District and the Architect issue a CO based upon a proposed change, cost, time, or cost and time that may be incurred on the Project or arising from an RFP, ICD, or CCD.

7.6.2 Changes in Price

A COR shall include breakdowns per Article 7.7 to validate any change in Contract Price due to proposed change or Claim.

7.6.3 Changes in Time

A COR shall also include any additional time required to complete the Project only if the delay is a critical path delay. Any additional time requested shall not be the number of days to make the proposed change, but must be based upon the impact to the Project Schedule as defined in Article 8. A schedule fragnet showing the time delay must be submitted with the COR. Any changes in time will be granted only if there is an impact to the critical path. If Trade Contractor fails to request a time extension in a COR, then Trade Contractor is thereafter precluded from requesting or claiming a delay.

7.7 COST OF CHANGE ORDERS

7.7.1 Scope

Within ten (10) days after a request is made for a change that impacts the Contract Sum as defined in Article 9.1, the critical path, or the Contract Time as defined in Article 8.1.1, Trade Contractor shall provide the District and the Architect, with a written estimate of the effect of the proposed CO upon the Contract Sum and the actual cost of construction, which shall include a complete itemized cost breakdown of all labor and material showing actual quantities, hours, unit prices, and wage rates required for the change, and the effect upon the Contract Time of such CO. Changes may be made by District by an appropriate written CO, or, at the District’s option, such changes shall be implemented immediately upon Trade Contractor’s receipt of an appropriate written Construction Change Document.

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

7.7.1.1 *Time and Material Charges.* If the District orders Work on a “time and material” basis, timesheets shall be signed daily by the Inspector or District Representative at or near the time the Work is actually undertaken and shall show the hours worked, and the Work actually completed. No time sheets shall be signed the next day. A copy shall be provided to the Person signing the document at the time the document is signed, but not before 10 am the following day.

7.7.2 Determination of Cost

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

- a. Mutual acceptance of a lump sum properly itemized and supported by sufficient substantiating data to permit evaluation. If an agreement cannot be reached within fifteen (15) days after submission and negotiation of Trade Contractor’s proposal, Trade Contractor may submit pursuant to Article 7.7.3. Submission of sums which have no basis in fact are at the sole risk of Trade Contractor and may be a violation of the False Claims Act set forth under Government Code Section 12650 et seq.);
 1. If the District objects to 7.7.2(a) as a method for submission due to inaccuracies in the submitted amount, overstatement of manpower or time required to perform the CO, or unreliability of the data provided, the District may either have the Architect or a professional estimator determine the cost for the CO, and the applicable time extension, or the Trade Contractor shall utilize Article 7.7.2(d) or 7.7.3.
 2. Once the District provides a written objection to use of Article 7.7.2(a) due to unreliability of the estimated price, the Trade Contractor shall no longer utilize mutual acceptance of a lump sum as a method for submission of CO’s and shall provide a breakdown of estimated or actual costs pursuant to Article 7.7.2(d) or 7.7.3.
- b. By unit prices contained in Trade Contractor’s original bid and incorporated in the Project documents or fixed by subsequent agreement between District and Trade Contractor;
- c. Cost to be determined in a manner agreed upon by the parties and a mutually acceptable fixed or percentage fee. However, in the case of disagreement, Trade Contractor must utilize the procedure under Article 7.7.3; or
- d. By cost of material and labor and percentage of overhead and profit. If the value is determined by this method the following requirements shall apply:

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1. *Basis for Establishing Costs*

- i. Labor will be the cost for wages prevailing locally for each craft or type of workers at the time the extra Work is done, plus employer payments of payroll taxes and workers compensation insurance (exclude insurance costs as part of the overhead and profit mark-up), health and welfare, pension, vacation, apprenticeship funds, and other direct costs resulting from Federal, State, or local laws, as well as assessments or benefits required by lawful collective bargaining agreements. In no case shall the total labor costs exceed the applicable prevailing wage rate for that particular classification. The use of a labor classification which would increase the extra Work cost will not be permitted unless Trade Contractor establishes the necessity for such additional costs. Labor costs for equipment operators and helpers shall be reported only when such costs are not included in the invoice for equipment rental.
- ii. Materials shall be at invoice or lowest current price at which such materials are locally available and delivered to the Site in the quantities involved, plus sales tax, freight, and delivery. The District reserves the right to approve materials and sources of supply or to supply materials to Trade Contractor if necessary for the progress of the Work. No markup shall be applied to any material provided by the District.
- iii. Tool and Equipment Rental. No payment will be made for the use of tools which have a replacement value of \$250 or less.

Regardless of ownership, the rates to be used in determining equipment rental costs shall not exceed listed rates prevailing locally at equipment rental agencies or distributors at the time the Work is performed. Rates applied shall be appropriate based on actual equipment need and usage. Monthly, weekly or other extended use rates that results in the lowest cost shall be applied if equipment is used on site for extended periods.

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

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

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

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

If tool and equipment charges are part of a Dispute, Claim, or Appeal, the District reserves the right to utilize actual costs for tools and equipment or a depreciation rate for equipment based on audit finding under Article 13.11 and deduct any rental charges that exceed actual or depreciated costs.

- e. Other Items. The District may authorize other items which may be required on the extra work. Such items include labor, services, material, and equipment which are different in their nature from those required by the Work, and which are of a type not ordinarily available from Trade Contractor or any of the Subcontractors. Invoices covering all such items in detail shall be submitted with the request for payment.
- f. Invoices. Vendors’ invoices for material, equipment rental, and other expenditures shall be submitted with the COR. If the request for payment is not substantiated by invoices or other documentation, the District may establish the cost of the item involved at the lowest price which was current at the time of the Daily Report.
- g. Overhead. Overhead, including direct and indirect costs, shall be submitted with the COR and include: field overhead, home office overhead, off-site supervision, CO preparation/negotiation/research, time delays, Project interference and disruption, additional guaranty and warranty durations, on-site supervision, additional temporary protection, additional temporary utilities, additional material handling costs, liability and property damage insurance, and additional safety equipment costs.

7.7.3 Format for COR or CO’s

The following format shall be used as applicable by the District and Trade Contractor to communicate proposed additions to the Contract. All costs submitted shall be actual costs and labor shall be unburdened labor. Refer to Division 1 for a copy of the Construction Change Order form.

		<u>EXTRA</u>	<u>CREDIT</u>
(a)	Material (attach itemized quantity and unit cost plus sales tax)	_____	_____
(b)	Labor Not to Exceed Applicable Prevailing Wage Rates (attach itemized hours and rates)	_____	_____
(c)	Equipment (attach invoices)	_____	_____
(d)	Subtotal	_____	_____

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		<u>EXTRA</u>	<u>CREDIT</u>
(e)	If Subcontractor performed work, add Subcontractor's overhead and profit to portions performed by Subcontractor, not to exceed 10% of item (d).		
(f)	Subtotal		
(g)	Contractor's Overhead and Profit: Not to exceed 10% of Item (d) if Contractor performed the work. No more than 5% of Item (d) if Subcontractor performed the work. If work was performed by Contractor and Subcontractors, portions performed by Contractor shall not exceed 10% of Item (d), and portions performed by Subcontractor shall not exceed 10% of Item (d).		
(h)	Subtotal		
(i)	Bond not to exceed one percent (1%) of Item (h)		
(k)	TOTAL		
(l)	Time/Days		

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

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

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

7.7.3.1 *Adjustment for Time and Compensable Delay.* A CO shall also include any additional time required to complete the Project. Any additional time requested shall not be the number of days to make the proposed change, but must be based upon the impact to the Project Schedule as defined in Article 8 of the General Contract. A schedule fragnet showing the time delay must be submitted with the CO. Any changes in time will be granted only if there is an impact to the critical path. If Trade Contractor fails to request a time extension in a CO, then Trade Contractor is thereafter precluded from requesting or claiming a delay.

7.7.4 Deductive Change Orders

All Deductive Change Order(s) must be prepared utilizing the form under Article 7.7.3 (a) – (d) only, setting forth the actual costs incurred. Except in the case of an Article 2.2 or 9.6 Deductive Change Order where no mark-up shall be allowed, Trade Contractor will be allowed a maximum of 5% total profit and overhead.

For unilateral Deductive Change Orders, or where credits are due from Trade Contractor for Allowances, Deductive Items, Inspection, Damage, DSA CCD review costs, Architect or Inspector costs for after hours or corrective services, Work removed from the Agreement under Article 2.2 or Article 9.6, there shall be no mark-up.

District may, any time after a Deductive Change Order is presented to Trade Contractor by District for items under Article 2.2 or Article 9.6 of if there is disagreement as to the Deductive Change Order, issue a unilateral Deductive Change Order on the Project and deduct the Deductive Change Order from a Progress Payment, Final Payment, or Retention.

7.7.5 Discounts, Rebates, and Refunds

For purposes of determining the cost, if any, of any change, addition, or omission to the Work hereunder, all trade discounts, rebates, refunds, and all returns from the sale of surplus materials and equipment shall accrue and be credited to Trade Contractor, and Trade Contractor shall make provisions so that such discounts, rebates, refunds, and returns may be secured, and the amount thereof shall be allowed as a reduction of Trade Contractor's cost in determining the actual cost of construction for purposes of any change, addition, or omissions in the Work as provided herein. All CO's are subject to Audit under Article 13.11 for discounts, rebates and refunds.

With respect to portions of the Work performed by COs and CCD's on a time-and-materials, unit-cost, or similar basis, Trade Contractor shall keep and maintain cost-accounting records in a format consistent with accepted accounting standards and satisfactory to the District, which shall be available to the District on the same terms as any other books and records Trade Contractor is required to maintain under the Contract Documents.

Any time and material charges shall require Inspector's signature on time and material cards showing the hours worked and the Work actually completed. (See Article 7.7.1.1)

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7.7.6 Notice Required

If Trade Contractor desires to initiate a Dispute for an increase in the Contract Price, or any extension in the Contract Time for completion, Trade Contractor shall notify the applicable party responsible for addressing the Dispute or Claim pursuant to Article 4.6. No Claim or Dispute shall be considered unless made in accordance with this subparagraph. Trade Contractor shall proceed to execute the Work even though the adjustment may not have been agreed upon. Any change in the Contract Price or extension of the Contract Time resulting from such Claim shall be authorized by a CO.

7.7.7 Applicability to Subcontractors

Any requirements under this Article 7 shall be equally applicable to CO's, COR's or ICD's issued to Subcontractors by Trade Contractor to the same extent required by the Trade Contractor.

7.7.8 Alteration to Change Order Language

Trade Contractor shall not alter or reserve time in COR's, CO's or ICD's. Trade Contractor shall execute finalized CO's and proceed under Article 7.7.7 and Article 4.6 with proper notice. If Trade Contractor intends to reserve time without an approved CPM schedule prepared pursuant to Article 8 or without submitting a fragnet showing delay to critical path, then Trade Contractor may be prosecuted pursuant to the False Claim Act.

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ARTICLE 8 TIME AND SCHEDULE

8.1 DEFINITIONS

8.1.1 Contract Time

The Work performed by all Trade Contractors, coordinated through CM shall reach Substantial Completion (See Article 1.1.55) within the time specified in the Agreement Form. Moreover, Trade Contractors, coordinated and in concert with each other, shall perform its Work in strict accordance with the Project Milestones and Outline Schedule in the Contract Documents inclusive of all Float and other Baseline inclusions as noted in Article 8.3.2.12 and as otherwise specifically noted in Article 8.

8.1.2 Development of a Project Baseline Schedule

All Trade Contractors shall perform Work for the Project based on timing and sequences required under the Outline Schedule provided with the Contract Documents so Substantial Completion (See Article 1.1.55) is reached within the Contract Time. A Project Baseline Schedule will be developed from the Trade Contractor Baseline Schedule developed by Trade Contractor from the Outline Schedule provided in the Contract Documents. The Project Baseline Schedule incorporates input on timing, sequence, and durations so Milestones and the date of Substantial Completion can be reached in the Contract Time (including all Float and other Baseline inclusions as noted in Article 8.3.2.12). Once the Project Baseline Schedule is developed, Trade Contractor shall perform its Work in strict accordance with the Project Baseline Schedule to meet all Project Milestones.

Contract Time includes and incorporates all Float and other Baseline inclusions as noted in Article 8.3.2.12 and as otherwise specifically noted in Article 8.

8.1.3 Notice to Proceed

District may give a NTP to commence work for the Project within ninety (90) days of the award of the bid by District. All Trade Contractors will receive a copy of this NTP. Trade Contractors are to immediately commence preparing Submittals, Trade Contractor Baseline Schedules and commence attendance at Initial Trade Contractor Coordination Meetings after receipt of the NTP. However, not all Trade Contractors will immediately commence Work. Once Trade Contractor Baseline Schedules are reviewed and coordinated, Trade Contractor shall schedule their work based on the CM prepared Project Baseline Schedule, which shall form the timing and basis for Trade Contractor's Work. If there are areas of conflict or issues with how Trade Contractor Baseline Schedule was incorporated into the Project Baseline Schedule, Trade Contractor must provide written notice within ten (10) days following issuance of the Project Baseline Schedule. The Project Baseline Schedule determines the timing of Work for the entire Project for all Trade Contractors and is prepared so all Milestones are met and all Work shall be completed in the Contract Time.

8.1.4 Computation of Time

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

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8.1.5 Float

Float is time the total number of days an activity may be extended or delayed without delaying the Completion Date shown in the schedule. Float will fall into three categories: (1) Rain Days; (2) Governmental Delays; and, (3) Project Float. Project Float and Rain Days are owned by the Project and may be utilized as necessary for critical path delays once the days become available for consumption (i.e. the Rain Day arrives and is not utilized since rain did not occur or Work was performed on the interior of a building). Float is applicable to Critical Activities for the entire Project and shall be applied to each Trade Contractor based on the Trade Contractor's sequence of Work in relation to the Project Baseline Schedule that is issued and occasionally updated by CM in Schedule Updates. However, Governmental Delay Float shall not be utilized for purposes other than to address critical path delays that arise due to approvals, Inspector approvals or verifications on governmental forms.

8.1.5.1 *Governmental Delay Float.* It is anticipated that there will be governmental generated delays over the course of the Project. Specific to DSA approvals, it is anticipated that no less than twelve (12) days per calendar year shall be set aside as Governmental Float to be utilized on critical path delays. A pro-rated number of days shall be calculated based on length of Contract Time. (For example, a two (2) year Contract Time shall require twenty-four (24) days of Governmental Float. If the Contract Time is 182 days, then the Contract Time shall require six (6) days of Governmental Float) This Governmental Delay Float must be incorporated into the Trade Contractor Baseline Schedule and should be incorporated in each critical activity as Trade Contractor deems fit. Specifically, major categories of Work under the DSA 152 (Project Inspection Card) should be allocated Governmental Delay Float at the Trade Contractor's discretion. Governmental Delay Float on the Project may exceed 12 days per one (1) year period, but Trade Contractor is required to include not be less than 12 days of Governmental Delay Float during each one (1) year period.

The Project Baseline Schedule may carry Governmental Delay Float as a float category allowance item to be consumed as necessary during the course of the Project at the CM's option.

Trade Contractor's failure to establish a protocol for requesting inspections is not grounds to utilize Governmental Delay Float. As noted in Article 3.1.4, 48 hours advance notice of commencing Work on a new area is required after submitting form DSA 156 and under PR 13-01 Special Inspection reports are not required to be posted until at least 14 days after the Work was inspected. Failure to plan, and pay (if applicable) for quicker delivery of Special Inspections is not Governmental Delay Float under Article 8.1.5.1. If Governmental Delay Float is not utilized, this float is carried through to other DSA 152 categories of inspection and consumed over the course of the Project

Governmental Delay Float may be utilized for a DSA Stop Work Order regardless of fault as defined under Education Code Section 17307.5(b).

8.1.5.2 *Inclement Weather (Rain Days).* Time extensions for unusually severe weather if it results in precipitation or other conditions which in the amount, frequency, or duration is in excess of the norm at the location and time of year in question as established by NOAA weather data. No less than 22 calendar days for each calendar year for Southern California will be allotted for in the Trade Contractor Baseline Schedule and Project Baseline Schedule for each winter weather period or carried at the end of the schedule as Rain Float. Float for weather days in other geographical regions shall be adjusted based on NOAA weather data for the geographical location. As part of Trade Contractor's Baseline Schedule, Trade Contractor has anticipated all the days it takes as part of Trade Contractor's Scope of Work to dry out and re-prepare areas that may be affected by weather delays which extend beyond the actual weather days. The weather days that occur during the course of the Project that affect Trade Contractor that are not used will become float for the Project's use. Trade Contractor weather

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delays during Trade Contractor Scope of Work will not be allowed on a day-for-day weather delay for periods noted as float in the Schedule. Trade Contractor is expected to work seven (7) days per week (if necessary, irrespective of inclement weather), to maintain access, and to protect the Work under construction from the effects of inclement weather. Additional days beyond the NOAA shall be considered under the same criteria that weather days are granted below.

A Rain Day shall be granted if the weather prevents a critical activity when requested by the Trade Contractor from beginning Work at the usual daily starting time, or prevents the Trade Contractor from proceeding with seventy-five (75%) of the normal labor and equipment force towards completion of the day's current controlling item on the accepted schedule for a period of at least five hours, and the crew is dismissed as a result thereof, the Architect will designate such time as unavoidable delay and grant one (1) critical path activity calendar-day extension if there is no available float for the calendar year.

The Project Baseline Schedule may carry Rain Float as a float category allowance item to be consumed as necessary during the course of the Project at the CM's option.

8.1.5.3 *Project Float.* The Trade Contractor (or CM) may determine some activities require a lesser duration than allocated and may set aside float in the Project Schedule. There shall be no early completion. Instead, to the extent float is either addressed at the end of the Project or throughout each category of critical path work, Project Float may be used as necessary during the course of the Project and allocated on a first, come first serve basis. However, the use of float does not extend to Governmental Delay Float, which shall only be used for Governmental Delays.

8.2 HOURS OF WORK

8.2.1 Sufficient Forces

Trade Contractors shall continuously furnish sufficient forces to ensure the prosecution of the Work in accordance with the Project Baseline Schedule and Updated Schedules for the Project.

8.2.2 Performance During Working Hours

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

8.2.3 Costs for After Hours Inspections

If the Work done after hours is required by the Contract Documents, a Trade Contractor Recovery Schedule, or as a result of the Trade Contractor's failure to plan, and inspection must be conducted outside the Inspector's regular working hours, the costs of any after hour inspections, shall be borne by the Trade Contractor.

If the District allows Trade Contractor to do Work outside regular working hours for the Trade Contractor's convenience, the costs of any inspections required outside regular working hours shall be addressed through a Deductive Change Order shall be issued from the next Progress Payment.

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If Trade Contractor elects to perform Work outside the Inspector's regular working hours, costs of any inspections required outside regular working hours shall be invoiced to Trade Contractor by the District and a Deductive Change Order.

8.3 PROGRESS AND COMPLETION

8.3.1 Time of the Essence

Time limits stated in the Outline Schedule and the Milestones and Contract Time submitted with Contract Documents are of the essence to the Contract. By executing the Agreement, the Trade Contractor confirms that the Contract Time and Milestones are a reasonable period for performing the Work.

8.3.2 Trade Contractor Baseline Schedule Requirements

8.3.2.1 *Timing:* Within ten (10) calendar days after NTP, Trade Contractor shall submit a practical schedule showing the order in which the Trade Contractor proposes to perform the Work, the durations of each category of Work, and the dates on which the Trade Contractor contemplates starting and completing the categories of the Work.

8.3.2.2 *Trade Contractor Baseline Schedule.* This first schedule which outlines the Trade Contractor's view of the practical way in which the Work will be accomplished is the Trade Contractor Baseline Schedule. If the Trade Contractor Fails to submit its Baseline Schedule within the ten (10) days noted, then District may withhold processing and approval of progress payments pursuant to Article 9.4 and 9.6. As part of the preparation of Trade Contractor Baseline Schedule, Trade Contractor shall undertake the following:

- a. Review of Durations in the Outline Schedule shall be undertaken carefully.
- b. Coordination with other Trade Contractors. Where interface is required with other Trade Contractors, Trade Contractor Baseline Schedule must note where coordination is required and the coordination points and dates shall be noted and forwarded in an outline or narrative basis to the affected Trade Contractor so the interface and timing may be reviewed at Trade Contractor Initial Coordination Meetings.
- c. Preparation of BIM Documents. When preparing BIM documents, coordination and timing of coordination of items with other trade contractors must also be noted on the Trade Contractor Baseline Schedule along with a narrative of the exact areas that require coordination with other trades.
- d. Clash Check or Coordination Checks. During the Trade Contractor Initial Coordination meetings, Trade Contractors are required to review and address conflicts and clashes that are identified so issues can be resolved on a Building Information Modeling methodology and RFI's or questions generated rather than the more expensive delays to the schedule or review and update while the Project is in progress. Trade Contractor must attend all Initial Coordination Meetings to address Schedule and timing of BIM review.

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- e. Issues with Outline Schedule must be addressed in writing by Trade Contractor identifying the issue, duration, conflict, or other problem with the Outline Schedule within ten (10) days after NTP. The issues will be addressed at the first Trade Contractor Coordination meeting and each Trade Contractor Coordination meeting until a Project Baseline Schedule for the entire Project is established.
- f. Once the Project Baseline Schedule is Provided, Trade Contractor must provide written objections within ten (10) days after receipt of the Project Baseline Schedule and note the specific items that are issues and request revision, if necessary.

8.3.2.3 *District Review and Approval:* The Design Team will review both a paper and electronic copy of Trade Contractor Baseline Schedule and note comments under Article 8.3.2(e) or as otherwise noted in this Article and either approve or disapprove the Trade Contractor Baseline Schedule.

- a. Schedules to be Provided Electronically. All Baseline, Update, and Recovery Schedules shall be prepared using an accepted electronic scheduling program acceptable to CM. All Schedules shall be delivered in an electronic format usable by the CM. All logic ties and electronic information shall be included in the electronic copy of the schedule that is delivered to the CM.

8.3.2.4 *Schedule Must Be Within the Given Contract Time.* The Trade Contractor Baseline Schedule shall not add durations that cause the Contract Time to be exceeded, shall not exceed time limits set forth in the Contract Documents and shall comply with all of the scheduling requirements as set forth in the Specifications.

8.3.2.5 *Submittals Must Be Incorporated (See Articles 3.7 and 3.9):* Trade Contractor shall include Submittals as line items in the Trade Contractor Baseline Schedule as required under Article 3.7.2 and 3.9.6. Submittals shall not delay the Work, Milestones, or the Completion Date. Failure to include Submittals in the Trade Contractor Baseline Schedule shall be deemed a material breach by the Trade Contractor.

8.3.2.6 *Float Must Be Incorporated:* The schedule must indicate the beginning and completion of all phases of construction and shall use the “Critical Path Method” (commonly called CPM) for the value reporting, planning and scheduling, of all Work required under the Contract Documents. Trade Contractor Baseline Schedule must incorporate all Milestones in Outline Schedule, apply Governmental Float as deemed appropriate in the Trade Contractor’s discretion. The Trade Contractor Baseline Schedule shall incorporate the Outline Schedule provided as part of the Contract Documents and shall note durations that will not be adequate or should be shortened based on Trade Contractor’s Review. These changes shall be identified, reviewed with other Trade Contractor Baseline Schedules and incorporated into CM’s Project Baseline Schedule for the Project. CM’s Project Baseline Schedule is critical to CM Coordination, Sequencing of Trades, and to ensure monitoring of the progress of each Trade Contractor’s Work.

8.3.2.7 *No Early Completion.* Trade Contractor shall not submit a Trade Contractor Baseline Schedule showing early completion without indicating float time through the date set for Project completion by District. Trade Contractor’s schedule shall account for all days past early completion as

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float which belongs to the Project. Usage of float shall not entitle Trade Contractor to any delay claim or damages due to delay.

8.3.2.8 *Use of Outline Schedule Provided in Bid Documents.* The Bid will include an Outline Schedule providing anticipated durations and sequences that incorporates key Milestones along with general timing for the Project that incorporates float and other Baseline inclusions as noted in Article 8.3.2.12. The preliminary Outline Schedule is not intended to serve as the Project Baseline Schedule utilized for construction. It is up to the Trade Contractor to study, participate and assist in developing a Project Baseline Schedule to address the actual durations and sequences of Work that is anticipated while maintaining the Milestones provided by the District. Contract shall obtain information from Trade Contractor's Subcontractors and vendors on the planning, progress, delivery of equipment, coordination, and timing of availability of Subcontractors so a practical plan of Work is fully developed and represented in the Project Baseline Schedule.

8.3.2.9 *Trade Contractor Failure to Submit Trade Contractor Baseline Schedule.* Trade Contractor failure to submit a Trade Contractor Baseline Schedule is a material breach of the Contract and grounds for Termination pursuant to Article 14. However, CM, in its sole discretion, may require Trade Contractor's written consent to the Project Baseline Schedule prepared from other Trade Contractor information utilized to build the Project Baseline Schedule as a whole.

8.3.2.10 *Incorrect Logic, Durations, Sequences, or Critical Path.* The CM may reject or indicate durations, sequences, critical path or logic in Trade Contractor Baseline or Updated Schedule are not acceptable and request changes. The electronic copy of the Schedules shall have adequate information so logic ties, duration, sequences and critical path may be reviewed electronically. Trade Contractor is to diligently rebuild and resubmit the Schedules to represent the Trade Contractor's plan to complete the Work and maintain Milestones at the next progress meeting, or before the next progress meeting. If Trade Contractor is not able to build a schedule that is acceptable to the CM and District, the CM and District reserve the right to build an acceptable Trade Contractor Baseline Schedule on behalf of the Trade Contractor from the information received.

8.3.2.11 *Trade Contractor Responsibility for Schedules Even if Schedule Issues Are Not Discovered.* Failure on the part of the District to discover errors or omissions in schedules submitted shall not be construed to be an approval of the error or omission and a flawed schedule is not grounds for a time extension.

8.3.2.12 *Inclusions in Trade Contractor Baseline Schedule.* In addition to Trade Contractor Baseline Scheduling requirements set forth at Article 8.3.2 and Schedule Update requirements, Trade Contractor is specifically directed to break out separately in Trade Contractor's Baseline Schedule the following items required pursuant to these General Conditions, including but not limited to:

- a. Rain Day Float (excluding inclement weather) as required under Article 8.1.5.2. For example, if the NOAA provides 22 days of Rain Days, all 22 days must be incorporated and noted in the Schedules. Further, any days required to clean-up or dry out shall be included for operations that are likely to require a clean-up or dry out period. Days that are not utilized shall be considered float owned by the Project.
- b. Governmental Delay Float under Article 8.1.5.1. This Governmental Delay Float shall only be utilized for Governmental Delays and shall not be considered available float owned by the Project. This float shall only be distributed to the Project upon the completion of

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the Project and shall be used to offset Liquidated Damages and shall not generate compensable delays.

- c. Submittal and Shop Drawing schedule under Article 3.9.
- d. Deferred Approvals under Article 3.9.
- e. Time for separate and other Trade Contractors, including furniture installation and start up activities, under Article 6.1.
- f. Coordination and timing of any drawings, approvals, notifications, permitting, connection, and testing for all utilities for the Project. Article 2.1.4
- g. Testing, special events, or school activities

8.3.2.13 *Failure to include Mandatory Schedule Items.* District may withhold payment pursuant to Articles 9.3, 9.4 and 9.6. In lieu of withholding payment for failure to include Mandatory Schedule Items, after the CM has notified the Trade Contractor of failure to meet the Trade Contractor Baseline Schedule or Updated Schedule requirements and the Trade Contractor fails to correct the noted deficiencies or the Trade Contractor does not provide an updated schedule correcting the deficiencies, then Trade Contractor is deemed to have agreed to the durations and sequences set forth in the Outline Schedule and the CM created Project Baseline Schedule and Schedule Updates. In addition, Trade Contractor shall waive any consequential or delay damages or disruption damages for failure to prepare an approved Trade Contractor's Baseline Schedule, or representation of the logical sequence and durations of Trade Contractor's Work and, thus, impacts, coordination and delays have not been articulated and are not available as grounds to evaluate impacts to the Trade Contractor's anticipated Work for the Project. Trade Contractor shall not be granted an extension of time for failure to obtain necessary items and approvals under Article 8.3.2 and for the time required for failure to comply with laws, building codes, and other regulations (including Title 24 of the California Code of Regulations). Trade Contractor shall maintain all items required under Article 8.3.2 (and specifically Article 8.3.2.12) schedule items in the Project Baseline Schedule and shall be deemed responsible for delivery of the Trade Contractor Scope of Work as outlined in the Project Baseline Schedule and any Schedule updates. If the Contract Time is exceeded, then Trade Contractor shall be subject to the assessment of Liquidated Damages pursuant to Article 8.4.

8.3.2.14 *Failure to Meet Requirements.* Failure of the Trade Contractor to provide proper Trade Contractor Baseline Schedules or Trade Contractor Schedule updates as required by this Article and Article 9 is a material breach of the Contract and grounds for Termination pursuant to Article 14. The District, at its sole discretion, may choose, instead, to withhold, in whole or in part, any Progress Payments or Retention amounts otherwise payable to the Trade Contractor.

In addition, Trade Contractor shall be deemed to have agreed to the durations and sequences set forth in the Project Baseline Schedule and Schedule Updates. In addition, Trade Contractor shall waive any consequential or delay damages or disruption damages for failure to prepare an approved Trade Contractor Baseline Schedule, or representation of the logical sequence and durations of Trade Contractor's Work and, thus, impacts, coordination and delays have not been articulated and are not available as grounds to evaluate impacts to the Trade Contractor's anticipated Work for the Project.

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8.3.3 Update Schedules

8.3.3.1 *Updates Shall Be Based on Approved Project Baseline Schedule.* The Project Baseline Schedule shall be used to build future schedule updates. Schedule Updates shall be a CPM based schedule consistent with the Project Baseline Schedule requirements of 8.3.2. In the case of utilization of Article 8.3.2.13 and no Trade Contractor Baseline Schedule has been approved, Schedule updates shall be provided monthly and each update shall incorporate all comments and revisions noted as not complying with the requirements of Article 8.3.2. Trade Contractor shall be held to the Article 8.3.2.13 unapproved Baseline Schedule, inclusive of all Milestones, adjusted for comments and all required Baseline Schedule Inclusions under Article 8.3.2.12.

8.3.3.2 *Schedule Updates.* Trade Contractor shall update the Project Baseline Schedule each month to address actual start dates and durations, the percent complete on activities, actual completion dates, estimated remaining duration for the Work in progress, estimated start dates for Work scheduled to start at future times and changes in duration of Work items

8.3.3.3 *Listing of Items Causing Delays.* Schedule Updates shall provide a listing of activities which are causing delay in the progress of Work and a narrative shall be provided showing a description of problem areas, anticipated delays, and impacts on the latest approved Project Baseline Schedule. Simply stating “District Delay” or “Architect Delay” shall be an inadequate listing. Delays shall only be listed if they meet the requirements of Article 8.4.

8.3.3.4 *Recovery Schedule.* In addition to providing a Schedule update every thirty (30) days, the Trade Contractor, if requested by the Architect or District, shall take the steps necessary to improve Trade Contractor’s progress and demonstrate to the District and Architect that the Trade Contractor has seriously considered how the lost time, the Completion Date, or the Milestones that are required will be met within the terms of the Contract. Trade Contractor shall immediately provide a Recovery Schedule showing how Milestones and the Completion Date will be met. In no case, shall a Recovery Schedule be provided later than ten (10) days following the request for a Recovery Schedule from the Architect or District.

- a. Failure to Provide a Recovery Schedule. Failure shall subject Trade Contractor to the assessment of Liquidated Damages for failure to meet the Contract Time. Refusal or failure to provide a Recovery Schedule shall be considered a substantial failure of performance and a material breach of Contract and may result in Termination of the Contract pursuant to Article 14.
- b. Recovery Schedule Acceleration without Additional Cost. The District may require Trade Contractor prepare a Recovery Schedule showing how the Project shall be accelerated, without any additional cost to the District. The District may order, without additional cost, the following:
 - i. Increase the number of shifts;
 - ii. Utilize overtime to recover the schedule; and/or
 - iii. Increase the days when Work occurs, including weekends, at the Project and at any manufacturer’s plant.

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- c. Recovery Schedule Acceleration without Additional Cost. If Trade Contractor Disputes that the Recovery Schedule acceleration shall be issued without additional costs, the Trade Contractor shall submit concurrent with Recovery Schedule Acceleration notice pursuant to Articles 8.4.6 and 8.4.4.

8.4 EXTENSIONS OF TIME - LIQUIDATED DAMAGES

8.4.1 Liquidated Damages

TRADE CONTRACTOR AND DISTRICT HEREBY AGREE THAT THE EXACT AMOUNT OF DAMAGES FOR FAILURE TO COMPLETE THE WORK WITHIN THE TIME SPECIFIED IS EXTREMELY DIFFICULT OR IMPOSSIBLE TO DETERMINE. IF THE WORK IS NOT SUBSTANTIALLY COMPLETED IN THE TIME SET FORTH IN THE AGREEMENT, IT IS UNDERSTOOD THAT THE DISTRICT WILL SUFFER DAMAGES. IT BEING IMPRACTICAL AND UNFEASIBLE TO DETERMINE THE AMOUNT OF ACTUAL DAMAGE, IT IS AGREED THE TRADE CONTRACTOR SHALL PAY TO THE DISTRICT THE AMOUNT LIQUIDATED DAMAGES SET FORTH IN THE AGREEMENT, FOR EACH CALENDAR DAY OF DELAY IN REACHING SUBSTANTIAL COMPLETION (SEE ART 1.1.55). CONTRACTOR AND ITS SURETY SHALL BE LIABLE FOR THE AMOUNT THEREOF PURSUANT TO GOVERNMENT CODE SECTION 53069.85.

8.4.2 Delay

Except and only to the extent provided under Article 7 and Article 8, by signing the Agreement, Trade Contractor agrees to bear the risk of delays to completion of the Work; and that Trade Contractor's bid for the Contract was made with full knowledge of this risk.

In agreeing to bear the risk of delays to complete the Work, Trade Contractor understands that, except and only to the extent provided otherwise in Article 7 and 8, the occurrence of events that delay the Work shall not excuse Trade Contractor from its obligation to achieve Completion of the Project within the Contract Time, and shall not entitle the Trade Contractor to an adjustment to the Contract time.

8.4.3 Excusable Delay

Trade Contractor shall not be charged for Liquidated Damages because of any delays in completion of Work which are not the fault or negligence of Trade Contractor or its Subcontractors, arising from Rain Float or Project Float, including acts of God, as defined in Public Contract Code Section 7105, acts of enemy, epidemics and quarantine restrictions. Trade Contractor shall within five (5) calendar days of beginning of any such delay notify District in writing of causes of delay; thereupon District shall ascertain the facts and extent of delay and grant extension of time for completing Work when, in its judgment, the findings of fact justify such an extension. Extensions of time shall apply only to that portion of Work affected by delay, and shall not apply to other portions of Work not so affected. An extension of time may only be granted after proper compliance with Article 8.3 requiring preparation and submission of a properly prepared CPM schedule.

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

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

8.4.3.3 *Extension Request.* In the event the Trade Contractor requests an extension of Contract time for unavoidable delay, such request shall be submitted in accordance with the provisions in the Contract Documents governing changes in Work (See Article 7). When requesting time, i.e., extensions, for proposed Change Orders, they must be submitted with the proposed Change Order with full justification and documentation. If the Trade Contractor fails to submit justification with the proposed Change Order it waives its right to a time extension at a later date. Such justification must be based on the official Contract schedule as updated at the time of occurrence of the delay or execution of Work related to any changes to the scope of Work. Blanket or general claims for extra days without specific detailed information as required herein or a blanket or general reservation of rights do not fulfill the requirements of this Article and shall be denied. The justification must include, but is not limited to, the following information:

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

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

8.4.4 Notice by Trade Contractor Required

Trade Contractor shall within five (5) calendar days of beginning of any delay on the Project shall notify the District in writing of causes of delay with justification and supporting documentation. In the case of a Recovery Schedule pursuant to Article 8.4.6, Contractor shall submit written notice concurrent with the Recovery Schedule. District will then ascertain the facts and extent of the delay and grant an extension of time for completing the Work when, in its judgment, the findings of fact justify such an extension. Extensions of time shall apply only to that portion of the Work affected by the delay and shall not apply to other portions of the Work not so affected.

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

8.4.4.1 *Adjustment for Compensable Delays.* The Schedule may be adjusted for a delay if, and only if, Trade Contractor undertakes the following:

- a. Trade Contractor submits a timely COR or CO pursuant to the requirements of Article 7.

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- b. Trade Contractor submits a fragnet showing the critical path delay caused by the COR, CO, Changed Condition, CCD, or ICD
- c. Trade Contractor has addressed all required float days in the fragnet.
- d. Trade Contractor submits a complete breakdown of all costs incurred utilizing the format of Article 7.3.3

8.4.5 No Additional Compensation for Coordinating Governmental Submittals and the Resulting Work

TRADE CONTRACTOR HAS PLANNED ITS WORK AHEAD OF TIME AND IS AWARE THAT GOVERNMENTAL AGENCIES, SUCH AS THE GAS COMPANIES, ELECTRICAL UTILITY COMPANIES, WATER DISTRICTS AND OTHER AGENCIES MAY HAVE TO APPROVE TRADE CONTRACTOR PREPARED DRAWINGS OR APPROVE A PROPOSED INSTALLATION. TRADE CONTRACTOR HAS INCLUDED DELAYS AND DAMAGES WHICH MAY BE CAUSED BY SUCH AGENCIES IN TRADE CONTRACTOR'S BID AND HAS INCLUDED ADEQUATE TIME IN THE TRADE CONTRACTOR'S BASELINE SCHEDULE. FAILURE TO ADEQUATELY PLAN AND SCHEDULE IS NOT A BASIS TO USE GOVERNMENTAL DELAY FLOAT.

8.4.6 District Right to Accelerate the Work

The District may direct the Trade Contractor to meet schedule requirements when the Work has been delayed. The District shall compensate the Trade Contractor for the additional costs incurred by acceleration to the extent that such costs are directly attributable to the acceleration and are incurred through no fault or negligence of the Trade Contractor.

8.4.6.1 *Management of Acceleration.* Trade Contractor acceleration shall not include Work that is part of the scope of Work detailed in the Plans and Specifications. Instead, the acceleration costs shall be premium or overtime and quantifiable additional work added to the Project meant to accelerate the Project. Trade Contractor is directed to keep consistent crews on the Project so time can be tracked. If crews are circulated off the Project or crews brought in only for overtime, the District may be charged for Contract Work and not accelerated time. In such case, the District may object to the costs submitted.

8.4.6.2 *Costs for Acceleration.* Cost for Acceleration shall be supported by backup documentation, and time sheets signed by the Inspector for each day work has been performed, at or near the time when the Work was performed. A listing on the time sheet shall document all labor, materials and services utilized that day and provide areas of work, and amount of work performed. Trade Contractor shall comply with submission requirements of Article 7.7.

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ARTICLE 9 PAYMENTS AND COMPLETION

9.1 CONTRACT SUM/ CONTRACT PRICE

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

9.2 COST BREAKDOWN

9.2.1 Required Information

Trade Contractor shall furnish the following:

- a. Within ten (10) days after Notice to Proceed, a detailed breakdown of the Contract Price (hereinafter “Schedule of Values”) for each Project, site, building, Milestone or other meaningful method to measure the level of Project Completion as determined by the District shall be submitted as a Submittal for the Project;
- e. Within ten (10) days after the date of the Notice to Proceed, a schedule of estimated monthly payment requests due the Trade Contractor showing the values and construction time of the various portions of the Work to be performed by it and by its Subcontractors or material and equipment suppliers containing such supporting evidence as to its correctness as the District may require;
- f. Within ten (10) days after the date of the Notice to Proceed, address, telephone number, telecopier number, California State Contractors License number, classification and monetary value of all subcontracts for parties furnishing labor, material, or equipment for completion of the Project.

9.2.2 Information and Preparation of Schedule of Values

9.2.2.1 *Break Down of Schedule of Values.* Schedule of Values shall be broken down by Project, site, building, Milestone, or other meaningful method to measure the level of Project Completion as determined by the District.

9.2.2.2 *Based on Trade Contractor Bid Costs.* The Schedule of Values shall be based on the costs from Trade Contractor’s bid to the District. However, the submission of the Schedule of Values shall not be front loaded so the Trade Contractor is paid a greater value than the value of the Work actually performed and shall not shift funds from parts of the Project that are later to Work that is performed earlier.

9.2.2.3 Largest Dollar Value for Each Line Item. Identify Subcontractors and materials suppliers proposed to provide portions of Work equal to or greater than ten thousand dollars (\$10,000) or one-half of one percent (0.5%) of their Contract Price, whichever is less.

9.2.2.4 *Allowances.* Any Allowances provided for in the Contract shall be a line item in the Schedule of Values.

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9.2.2.5 *Labor and Materials Shall Be Separate.* Labor and Materials shall be broken into two separate line items unless specifically agreed in writing by the District.

9.2.3 District Approval Required

The District shall review all submissions received pursuant to Article 9.2 in a timely manner. All submissions must be approved by the District before becoming the basis of any payment.

9.3 PROGRESS PAYMENTS

9.3.1 Payments to Trade Contractor

Unless there is a resolution indicating that the Work for the Project is substantially complex, within thirty-five (35) days after approval of the Request for Payment, Trade Contractor shall be paid a sum equal to ninety-five percent (95%) of the value of the Work performed (as certified by Architect and Inspector and verified by Trade Contractor) up to the last day of the previous month, less the aggregate of previous payments. In the case of a Project designated substantially complex, the sum paid to the Trade Contractor shall be equal to ninety percent (90%) of the value of the Work performed (as certified by the Architect and Inspector and verified by Trade Contractor) The value of the Work completed shall be the Trade Contractor's best estimate. Work completed as estimated shall be an approximation or estimate only and no mistake, inaccuracy, error or falsification in said any approved estimate shall operate to release the Trade Contractor, or any Surety upon any bond, from damages arising from such Work, or from the District's enforcement of each and every provision of this Contract including but not limited to the Performance Bond and Payment Bond. The District shall have the right to subsequently to correct any mistake, inaccuracy, error or falsification made or otherwise set forth in any approved Request for Payment and such correction may occur in any future Payment Application or in the Retention Payment to the Trade Contractor. No Surety upon any bond shall be relieved, released or exonerated of its obligations under this Contract or any applicable bond when the District is unable to correct an overpayment to the Trade Contractor due to any abandonment by the Trade Contractor or termination by the District.

The Trade Contractor shall not be entitled to have any payment requests processed, or be entitled to have any payment made for Work performed, so long as any lawful or proper direction given by the District concerning the Work, or any portion thereof, remains incomplete.

Notwithstanding anything to the contrary stated above, the Trade Contractor may include in its Request for Payment the value of any structural steel, glue laminated beams, trusses, bleachers and other such custom-made materials prepared specifically for the Project and unique to the Project so long as all of the following requirements are satisfied:

- a. The aggregate cost of materials stored off-site shall not exceed Twenty Five Thousand Dollars (\$25,000) at any time or as otherwise agreed to be District in writing;
- b. Title to such materials shall be vested in the District as evidenced by documentation satisfactory in form and substance to the District, including, without limitation, recorded financing statements, UCC filings and UCC searches;
- c. With each Trade Contractor Request for Payment, the Trade Contractor shall submit to the District a written list identifying each location where materials are

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stored off-site (which must be a bonded warehouse) and the value of the materials at each location. The Trade Contractor shall procure insurance satisfactory to the District (in its reasonable discretion) for materials stored off-site in an amount not less than the total value thereof;

- d. The consent of any Surety shall be obtained to the extent required prior to payment for any materials stored off-site;
- e. Representatives of the District shall have the right to make inspections of the storage areas at any time; and
- f. Such materials shall be: (1) protected from diversion, destruction, theft and damage to the reasonable satisfaction of the District; (2) specifically marked for use on the Project; and (3) segregated from other materials at the storage facility.

9.3.2 Purchase of Materials and Equipment and Cost Fluctuations

The Trade Contractor is required to order, obtain, and store materials and equipment sufficiently in advance of its Work at no additional cost or advance payment from District to assure that there will be no delays. Trade Contractor understands that materials fluctuate in value and shall have adequately addressed market fluctuations through agreements with Trade Contractor's vendors or by other means. Trade Contractor further understands and incorporates into Trade Contractor's bid cost any wage rate increases during the Project for the Trade Contractor's labor force as well as all other Subcontractor and vendor labor forces. District shall not be responsible for market fluctuations in costs or labor rate increases during the Project. Trade Contractor further has incorporated any and all cost increases in areas of Work where there may be schedule variations so that cost increases are not passed through to the District.

9.3.3 No Waiver

No payment by District hereunder shall be interpreted so as to imply that District has inspected, approved, or accepted any part of the Work. Trade Contractor specifically understands Title 24 Section 4-343 which states:

"It is the duty of the contractor to complete the work covered by his or her contract in accordance with the approved Plans and Specifications therefore. The contractor in no way is relieved of any responsibility by the activities of the Architect, Engineer, Inspector or DSA in the performance of such duties... In no case, however, shall the instruction of the Architect or registered Engineer be construed to cause work to be done with is not in conformity with the approved plans, specifications, and change orders..."

Notwithstanding any payment, the District may enforce each and every provision of this Contract which includes, but is not limited to, the Performance Bond and Payment Bond. The District may correct any error subsequent to any payment. In no event shall the Trade Contractor or the Surety be released or exonerated from performance under this Contract when the District overpays the Trade Contractor based upon any mistake, inaccuracy, error or falsification in any estimate that is included in any Request for Payment.

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9.3.4 Issuance of Certificate of Payment

The Architect shall, within seven (7) days after receipt of the Trade Contractor's Application for Payment, either approve such payment or notify the Trade Contractor in writing of the Architect's reasons for withholding approval in whole or in part as provided in Article 9.6. The review of the Trade Contractor's Application for Payment by the Architect is based on the Architect's observations at the Project and the data comprising the Application for Payment that the Work has progressed to the point indicated and that, to the best of the Architect's knowledge, information, and belief, the quality of the Work is in accordance with the Contract Documents. In some cases, the Architect may act upon or rely on the evaluation of the Work by the Inspector. This review of Payment Applications is sometimes called a "Pencil Draft." District's return of a Pencil Draft shall constitute the District's dispute of the Payment Application that has been submitted. Trade Contractor shall promptly respond to Pencil Drafts or Trade Contractor's Payment Applications may be delayed. Trade Contractor's failure to promptly respond to a Pencil Draft shall qualify as a delay in the prompt payment of a Request for Payment or Request for Retention. The foregoing representations are subject to: (1) an evaluation of the Work for conformance with the Contract Documents, (2) results of subsequent tests and inspections, (3) minor deviations from the Contract Documents correctable prior to completion, and (4) specific qualifications expressed by the Architect. The issuance of a Certificate for Payment will further constitute the Trade Contractor's verified representation that the Trade Contractor is entitled to payment in the amount certified.

9.3.5 Payment of Undisputed Contract Payments

In accordance with Public Contract Code Section 7100, payments by the District to the Trade Contractor for any and all undisputed amounts (including all Progress Payments, Final Payments or Retention Payment) is contingent upon submission of a proper and accurate Payment Application and the Trade Contractor furnishing the District with a release of all Claims against the District related to such undisputed amounts. Disputed Contract Claims in stated amounts may be specifically excluded by the Trade Contractor from the operation of the release. If, however, the Trade Contractor specifically excludes any Claims, the Trade Contractor shall provide details such as a specific number of disputed days or costs of any such exclusion in accordance with Articles 4.6 and 7.7.

9.4 APPLICATIONS FOR PROGRESS PAYMENTS

9.4.1 Procedure

9.4.1.1 *Application for Progress.* On or before the fifth (5th) day of each calendar month during the progress of the Work, Trade Contractor shall submit to the Architect an itemized Application for Progress Payment for operations completed. Such application shall be notarized, if required, and supported by the following or such portion thereof as Architect requires:

1. The amount paid to the date of the Payment Application to the Trade Contractor, to all its Subcontractors, and all others furnishing labor, material, or equipment for its Contract;
2. The amount being requested under the Payment Application by the Trade Contractor on its own behalf and separately stating the amount requested on behalf of each of the Subcontractors and all others furnishing labor, material, and equipment under the Contract;

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3. The balance that will be due to each of such entities after said payment is made;
4. A certification that the As-Built Drawings and Annotated Specifications are current;
5. Itemized breakdown of Work done for the purpose of requesting partial payment;
6. An updated Project Baseline Schedule or other Schedule updates in conformance with Article 8;
7. Failure to submit a Schedule update for the month or any previous month
8. The additions to and subtractions from the Contract Price and Contract Time;
9. A summary of the Retention held;
10. Material invoices, evidence of equipment purchases, rentals, and other support and details of cost as the District may require from time to time;
11. The percentage of completion of the Trade Contractor's Work by line item; and
12. An updated Schedule of Values from the preceding Application for Payment.
13. Prerequisites for Progress Payments
14. Any other information or documents reasonably requested by the District, Architect, CM or Inspector.

9.4.1.2 *First Payment Request.* The following items, if applicable, must be completed before the first payment request will be accepted for processing:

1. Installation of the Project sign;
2. Receipt by Architect of Submittals;
3. Installation of field office;
4. Installation of temporary facilities and fencing;
5. Submission of documents listed in the Article 9.2 relating to Contract Price breakdown;
6. Preliminary schedule analysis, due within 10 days after Notice to Proceed (see Article 8.3.2);
7. Trade Contractor's Baseline Schedule (to be CPM based in conformance with Article 8);

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8. Schedule of unit prices, if applicable;
9. Submittal Schedule;
10. Copies of necessary permits;
11. Copies of authorizations and licenses from governing authorities;
12. Initial progress report;
13. Surveyor qualifications;
14. Written acceptance of District's survey of rough grading, if applicable;
15. List of all Subcontractors, with names, license numbers, telephone numbers, and scope of work;
16. All bonds and insurance endorsements; and
17. Resumes of Trade Contractor's Project Manager, and if applicable, job site secretary, record documents recorder, and job site Superintendent.

9.4.1.3 *Second Payment Request.* The second payment request will not be processed until all Submittals and Shop Drawings have been accepted for review by the Architect.

9.4.1.4 *All Payment Requests.* No payment requests will be processed unless Trade Contractor has submitted copies of the certified payroll records for the Work which correlates to the payment request and a proper CPM schedule pursuant to Article 8 is submitted.

9.4.1.5 *Final Payment Application (90% or 95%).* (See Article 9.11.1)

9.4.1.6 *Final Payment Application (100%).* (See Article 9.11.3)

9.5 STOP NOTICE CLAIMS AND WARRANTY OF TITLE

Trade Contractor warrants title to all Work. Trade Contractor further warrants that all Work is free and clear of liens, claims, security interests, stop notices, or encumbrances in favor of the Trade Contractor, Subcontractors, material and equipment suppliers, or other persons or entities making a claim by reason of having provided labor, materials, and equipment relating to the Work. Failure to keep work free of liens, stop notices, claims, security interests or encumbrances is grounds to make a claim against Trade Contractor's Payment and Performance Bond to immediately remedy and defend.

If a lien or stop notice of any nature should at any time be filed against the Work or any District property, by any entity which has supplied material or services at the request of the Trade Contractor, Trade Contractor and Trade Contractor's Surety shall promptly, on demand by District and at Trade Contractor's and Surety's own expense, take any and all action necessary to cause any such lien or stop notice to be released or discharged immediately therefrom.

If the Trade Contractor fails to furnish to the District within ten (10) calendar days after written demand by the District, satisfactory evidence that a lien or stop notice has been so released, discharged, or secured, then District may discharge such indebtedness and deduct the amount required therefor, together with any and all losses, costs, damages, and attorney's fees and expense incurred or suffered by District

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from any sum payable to Trade Contractor under the Contract. In addition, any liens, stop notices, claims, security interests or encumbrances shall trigger the indemnification requirements under Article 3.16 and the Agreement Form, and shall act as a trigger under Civil Code Section 2778 and 2779 requiring reimbursement for any and all costs following the District's written demand has been made. Any withholdings by the District for stop notices in accordance with Civil Code Section 9358 shall not be a basis by the Trade Contractor to make a Claim for interest penalties under Public Contract Code Sections 7107 or 20104.50.

9.6 DECISIONS TO WITHHOLD PAYMENT

9.6.1 Reasons to Withhold Payment

The District may withhold payment in whole, or in part, to the extent reasonably necessary to protect the District if, in the District's opinion, the representations to the District required by Article 9.4 cannot be made. The District may withhold payment, in whole, or in part, to such extent as may be necessary to protect the District from loss because of, but not limited to:

- a. Defective Work not remedied;
- b. Stop notices served upon the District;
- c. Liquidated Damages assessed against the Trade Contractor;
- d. The cost of Completion of the Contract if there exists reasonable doubt that the Work can be Completed for the unpaid balance of any Contract Price or by the completion date;
- e. Damage to the District or other contractor;
- f. Unsatisfactory prosecution of the Work by the Trade Contractor;
- g. Failure to store and properly secure materials;
- h. Failure of the Trade Contractor to submit on a timely basis, proper and sufficient documentation required by the Contract Documents, including, without limitation, acceptable monthly progress schedules, Shop Drawings, Submittal schedules, Schedule of Values, Product Data and samples, proposed product lists, executed Change Order, Construction Change Documents, and verified reports;
- i. Failure of the Trade Contractor to maintain As-Built Drawings;
- j. Erroneous estimates by the Trade Contractor of the value of the Work performed, or other false statements in a Payment Application;
- k. Unauthorized deviations from the Contract Documents (including but not limited to Unresolved Notices of Deviations (DSA Form 154));
- l. Failure of the Trade Contractor to prosecute the Work in a timely manner in compliance with established progress schedules and completion dates.
- m. Failure to properly pay prevailing wages as defined in Labor Code Section 1720, et seq.;

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- n. Failure to properly maintain or clean up the Site;
- o. Payments to indemnify, defend, or hold harmless the District;
- p. Any payments due to the District including but not limited to payments for failed tests, or utilities changes or permits;
- q. Failure to submit an acceptable Schedule in accordance with Article 8;
- r. Failure to pay Subcontractor or suppliers as required by Article 9.8;
- s. Failure to secure warranties, including the cost to pay for warranties;
- t. Failure to provide releases from material suppliers or Subcontractors when requested to do so;
- u. Items deducted pursuant to Article 2.2;
- v. Incomplete Punch List items under Article 9.9 which have gone through the Article 2.2 process; or
- w. Allowances that have not been used.

9.6.2 Reallocation of Withheld Amounts

District may, in its discretion, apply any withheld amount to payment of outstanding Claims or obligations as defined in Articles 9.6 and 9.5. In so doing, District shall make such payments on behalf of Trade Contractor. If any payment is so made by District, then such amount shall be considered as a payment made under Contract by District to Trade Contractor and District shall not be liable to Trade Contractor for such payments made in good faith. Such payments may be made without prior judicial determination of Claim or obligation. District will render Trade Contractor an accounting of such funds disbursed on behalf of Trade Contractor.

If Trade Contractor defaults or neglects to carry out the Work in accordance with the Contract Documents or fails to perform any provision thereof, District may, after ten (10) calendar days written notice to the Trade Contractor and without prejudice to any other remedy make good such deficiencies. The District shall adjust the total Contract Price by reducing the amount thereof by the cost of making good such deficiencies. If District deems it inexpedient to correct Work which is damaged, defective, or not done in accordance with Contract provisions, an equitable reduction in the Contract Price (of at least 150% of the estimated reasonable value of the nonconforming Work) shall be made therefor.

9.6.3 Payment After Cure

When the grounds for declining approval are removed, payment shall be made for amounts withheld because of them. No interest shall be paid on any retainage or amounts withheld due to the failure of the Trade Contractor to perform in accordance with the terms and conditions of the Contract Documents.

9.7 NONCONFORMING WORK

Trade Contractor shall promptly remove from premises all Work identified by District as failing to conform to the Contract whether incorporated or not. Trade Contractor shall promptly replace and re-

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execute its own Work to comply with the Contract without additional expense to District and shall bear the expense of making good all Work of other contractors destroyed or damaged by such removal or replacement.

If Trade Contractor does not remove such Work which has been identified by District as failing to conform to the Contract Documents within a reasonable time, fixed by written notice, District may remove it and may store the material at Trade Contractor's expense. If Trade Contractor does not pay expenses of such removal within ten (10) calendar days' time thereafter, District may, upon ten (10) calendar days' written notice, sell such materials at auction or at private sale and shall account for net proceeds thereof, after deducting all costs and expenses that should have been borne by Trade Contractor.

9.8 SUBCONTRACTOR PAYMENTS

9.8.1 Payments to Subcontractors

No later than ten (10) days after receipt, or pursuant to Business and Professions Code Section 7108.5, the Trade Contractor shall pay to each Subcontractor, out of the amount paid to the Trade Contractor on account of such Subcontractor's portion of the Work, the amount to which said Subcontractor is entitled. The Trade Contractor shall, by appropriate agreement with each Subcontractor, require each Subcontractor to make payments to Sub-subcontractors in a similar manner.

9.8.2 No Obligation of District for Subcontractor Payment

The District shall have no obligation to pay, or to see to the payment of, money to a Subcontractor except as may otherwise be required by law.

9.8.3 Payment Not Constituting Approval or Acceptance

An approved Request for Payment, a progress payment, a Certificate of Substantial Completion, or partial or entire use or occupancy of the Project by the District shall not constitute acceptance of Work that is not in accordance with the Contract Documents.

9.8.4 Joint Checks

District shall have the right, if necessary for the protection of the District, to issue joint checks made payable to the Trade Contractor and Subcontractors and material or equipment suppliers. The joint check payees shall be responsible for the allocation and disbursement of funds included as part of any such joint payment. In no event shall any joint check payment be construed to create any contract between the District and a Subcontractor of any tier, any obligation from the District to such Subcontractor, or rights in such Subcontractor against the District. The District may choose to issue joint checks at District's sole discretion and only after all the requirements of that particular school district and county are specifically met. Some school districts cannot issue joint checks, so the ability to issue joint checks depends on the District and the specific circumstances.

9.9 COMPLETION OF THE WORK

9.9.1 Close-Out Procedures

9.9.1.1 *Incomplete Punch Items.* When the Trade Contractor considers the Work Substantially Complete (See Article 1.1.55 for definition of Substantially Complete), the Trade Contractor shall prepare and submit to the District a comprehensive list of minor items to be completed or

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corrected (hereinafter “Incomplete Punch Items” or “Punch List”). The Trade Contractor and/or its Subcontractors shall proceed promptly to complete and correct the Incomplete Punch Items listed. Failure to include an item on such list does not alter the responsibility of the Trade Contractor to complete all Work in accordance with the Contract Documents. Trade Contractor is aware that Title 24 Section 4-343(a) provides:

“RESPONSIBILITIES. IT IS THE DUTY OF THE CONTRACTOR TO COMPLETE THE WORK COVERED BY HIS OR HER CONTRACT IN ACCORDANCE WITH THE APPROVED PLANS AND SPECIFICATIONS THEREFOR. THE CONTRACTOR IN NO WAY IS RELIEVED OF ANY RESPONSIBILITY BY THE ACTIVITIES OF THE ARCHITECT, ENGINEER, INSPECTOR OR DSA IN THE PERFORMANCE OF SUCH DUTIES.

9.9.1.2 *Punch List Is Prepared Only After the Project Is Substantially Complete.* If any of the conditions noted in Article 1.1.55 as defining Substantial Completion are not met, the Inspector, Architect or District may reject Trade Contractor’s Incomplete Punch Items as premature. If the Architect and Inspector commence review of Incomplete Punch Items, all rights are reserved until the Project actually meets the definition of Substantially Complete. Liquidated Damages, warranties, and other contractual rights are not affected by Incomplete Punch Items unless otherwise addressed in these General Conditions.

Once the Inspector and the Architect determine the Project is Substantially Complete, a Certificate of Substantial Completion shall be issued. The Inspector and Architect shall prepare a Punch List of items which is an inspection report of the Work, if any, required in order to complete the Contract Documents and ensure compliance with the DSA Approved Plans so the Project may be completed by the Trade Contractor and a final DSA Close-Out is approved. When all Work for the Project is Complete, including Punch Lists and all Work complies with the approved Contract Documents and Change Orders, the Project has reached Final Completion.

9.9.1.3 *Punch List* is a list of minor items remaining to be completed prepared by the Design Team provided to Trade Contractors after Substantial Completion (See 1.1.55) which includes the following three (3) conditions: (1) all contractually required items have been installed; (2) All Fire/Life Safety Systems have been installed, and are working and signed off on the DSA Form 152 Inspection Card, all building systems including mechanical, electrical and plumbing are all functioning; and (3) the Project is fit for occupancy and its intended use.

9.9.1.4 *Time for Completion of Punch List.* Trade Contractor shall only be given a period of no more than thirty (30) days to complete the Punch List on the Project. During the Punch List period, the Trade Contractor’s Superintendent and Project Manager shall remain engaged in the Project and shall not be removed or replaced. If the Punch List is not completed at the end of the Punch List time then Trade Contractor shall issue a valued Punch List within 5 days after the date the Punch List time ends. If Trade Contractor does not issue such a list, the District or Architect may issue a valued Punch List to the Trade Contractor and withhold up to 150% of the value of the Punch List Work pursuant to Article 2.2 of this Agreement.

Failure to issue a timely written request for additional time to complete Punch List shall result in the deletion of the remaining Punch List Work pursuant to Article 2.2 and the issuance of a Deductive Change Order.

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- a. Extension of Time to Complete Punch List. If Trade Contractor cannot finish the Punch List Work during the time period allotted under Article 9.9.1.4, the Trade Contractor may make a written request for a Non-Compensable Punch List time extension accompanied by an estimate of the number of additional days it will take to complete the Punch List Work for a written consent from the District to allow continued Punch List Work. Punch List time extensions are a maximum of thirty (30) days for each request and must be accompanied by an itemized valued Punch List.
- b. If there is no valued Punch List accompanying any request or if Trade Contractor intends to undertake Punch List without the continued support and supervision of its Superintendent and Project Manager (as required under Article 3.2), the Architect, or the Design Team may issue a valued Punch List, reject the Punch List Time Extension and deduct 150% of the valued Punch List pursuant to Article 2.2 and proceed to Close-Out the Project. Trade Contractor shall cease work on the Project and proceed to complete Trade Contractor's Retention Payment Application and complete the Work for the Project required pursuant to Article 9.11.4.

9.9.1.5 *District Rejection of Written Request for Punch List Time Extensions.* Following sixty (60) Days of Punch List under Article 9.9.1.4, the District has the option of rejecting Punch List Time Extension requests. The District may proceed under Article 2.2 and deduct the value of remaining Punch List Work pursuant to Article 2.2. If the District rejects the Punch List Time Extension request then Trade Contractor shall cease Work on the Project and proceed to Final Inspection pursuant to Article 9.11.2.

9.9.1.6 *Punch List Liquidated Damages to Compensate for Added District Project Costs.* If the total time utilized for Punch List exceeds sixty (60) days [the thirty (30) day period under Article 9.9.1.4 plus an additional thirty (30) day period that has been requested in writing], and the District grants an additional written Punch List Time Extension that exceeds sixty (60) days of Punch List, then Contactor shall be charged Liquidated Damages of at least \$750 per day for continued Punch List Work to partially compensate for the Inspector, Architect, and CM's extended time on the Project. This Punch List Liquidated Damage number is based on anticipated cost for an Inspector on site and additional costs for the Architect and CM to reinspect Punch List items and perform the administration of the Close-out.

Trade Contractor received thirty (30) days without any charges for Punch List Liquidated Damages and is placed on notice pursuant to this Article 9.9.1.6 that \$750 is due for each day of Punch List that exceeds sixty (60) days at \$750, a cost much lower than typical (and actual) costs for Inspection, Architect and CM time required during Punch List. Starting at ninety (90) days of Punch List (an excessive number of days to complete Punch List), the District shall be entitled to adjust Punch List Liquidated Damages to an estimate of the actual costs incurred to oversee, monitor and inspect the Punch List. If costs exceed \$750 per day, the anticipated extended contract charges for Inspection, Architect, CM, and any other costs that will be incurred due to the extended Punch List shall be itemized and a daily rate of Punch List Liquidated Damages shall be presented in writing to the Trade Contractor within five (5) days following the receipt of a written request for Punch List Time Extension by the Trade Contractor that extends the Punch List time beyond ninety (90) days. This written notice of actual Punch List Liquidated Damages may be provided to the Trade Contractor at any time following the first written request for Punch List Time extension requested under Article 9.9.1.4. The adjusted actual Punch List

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Liquidated Damage amount shall be applicable as Punch List Liquidated Damages commencing on the ninetieth (90th) day of Punch List.

9.9.2 Close-Out Requirements for Final Completion of the Project

- a. Utility Connections. Buildings shall be connected to water, gas, sewer, and electric services, complete and ready for use. Service connections shall be made and existing services reconnected
- b. As-Built Up to Date and Complete. The intent of this procedure is to obtain an exact "As-Built" record of the Work upon completion of the Project. The following information shall be carefully and correctly drawn on the prints and all items shall be accurately located and dimensioned from finished surfaces of building walls on all As-Built Drawings
 1. The exact location and elevations of all covered utilities, including valves, cleanouts, etc. must be shown on As-Built
 2. Trade Contractor is liable and responsible for inaccuracies in As-Built Drawings, even though they become evident at some future date.
 3. Upon completion of the Work and as a condition precedent to approval of Retention Payment, Trade Contractor shall obtain the Inspector's approval of the "As-Built" information. When completed, Trade Contractor shall deliver corrected sepias and/or a Diskette with an electronic file in a format acceptable to the District.
 4. District may withhold the cost to hire a draftsman and potholing and testing service to complete Record As-Built Drawings at substantial cost if the Trade Contractor does not deliver a complete set of Record As-Built Drawings. This shall result in withholding of between \$10,000 to \$20,000 per building that does not have a corresponding Record As - Built Drawing.
- c. Any Work not installed as originally indicated on approved Drawings, Specifications, Addenda and other Contract Documents
- d. All DSA Close-Out requirements (See DSA Certification Guide) Trade Contractor is also specifically directed to Item 3.2 in the DSA Certification Guide and the applicable certificates for the DSA-311 form.
- e. Submission of Form 6-C. Trade Contractor shall be required to execute a Form 6-C as required under Title 24 Sections 4-343. The Trade Contractor understands that the filing with DSA of a Form 6-C is a requirement to obtain final DSA Approval of the construction by Trade Contractor and utilized to verify under penalty of perjury that the Work performed by Trade Contractor complies with the DSA approved Contract Documents. The failure to file a DSA Form 6C has two consequences. First, the Construction of the Project will not comply with the design immunity provisions of Government Code Section 830.6 and exposes the District and the individual Board members to personal liability for injuries that occur on the Project.

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Secondly, under DSA IR A-20, since the Project cannot be Certified by DSA, no future or further Projects will be authorized so Trade Contractor will have essentially condemned the campus from any future modernization or addition of new classrooms through their failure to file the DSA Form 6C.

1. *Execution of the DSA Form 6-C is Mandatory.* Refusal to execute the Form 6-C, which is a Final DSA Verified Report that all Work performed complies with the DSA approved Contract Documents is a violation of Education Code Section 17312 and shall be referred to the Attorney General for Prosecution.
 2. *Referral to the District Attorney for Extortion.* If the Trade Contractor's refusal to execute the DSA Form 6C is to leverage a Dispute, Claim or Litigation, then the matter shall also be referred to the District Attorney for prosecution for extortion.
 3. *Trade Contractor shall be Responsible for All Costs to Certify the Project.* The District may certify the Project complies with Approved Plans and Specifications by utilizing the procedures under the Project Certification Guide located at the DSA website. All costs for professionals, inspection, and testing required for an alternate Project Certification shall be the Trade Contractor's responsibility and the District reserves its right to institute legal action against the Trade Contractor and Trade Contractor's Surety for all costs to certify the Project and all costs to correct Non-Compliant Work that is discovered during the Alternate Certification Process.
- f. ADA Work that must be corrected to receive DSA certification. See Article 12.2.
- g. Maintenance Manuals. At least thirty (30) days prior to final inspection, three (3) copies of complete operations and maintenance manuals, repair parts lists, service instructions for all electrical and mechanical equipment, and equipment warranties shall be submitted. All installation, operating, and maintenance information and drawings shall be bound in 8½" x 11" binders. Provide a table of contents in front and all items shall be indexed with tabs. Each manual shall also contain a list of Subcontractors, with their addresses and the names of persons to contact in cases of emergency. Identifying labels shall provide names of manufactures, their addresses, ratings, and capacities of equipment and machinery.
1. Maintenance manuals shall also be delivered in electronic media for the Project. Any demonstration videos shall also be provided on electronic media.
- h. Inspection Requirements. Before calling for final inspection, Trade Contractor shall determine that the following Work has been performed:
1. The Work has been completed;
 2. All fire/ life safety items are completed and in working order;

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3. Mechanical and electrical Work complete, fixtures in place, connected and tested;
4. Electrical circuits scheduled in panels and disconnect switches labeled;
5. Painting and special finishes complete;
6. Doors complete with hardware, cleaned of protective film relieved of sticking or binding and in working order;
7. Tops and bottoms of doors sealed;
8. Floors waxed and polished as specified;
9. Broken glass replaced and glass cleaned;
10. Grounds cleared of Trade Contractor's equipment, raked clean of debris, and trash removed from Site;
11. Work cleaned, free of stains, scratches, and other foreign matter, replacement of damaged and broken material;
12. Finished and decorative work shall have marks, dirt and superfluous labels removed;
13. Final cleanup, as in Article 3.13;
14. All Work pursuant to Article 9.11; and
15. Furnish a letter to District stating that District Representative has been instructed in working characteristics of mechanical and electrical equipment.

9.9.3 Costs of Multiple Inspections

More than two (2) requests of the District to make inspections required under Article 9.11.2 shall be considered an additional service of Architect, Inspector, Engineer or other consultants shall be the Trade Contractor's responsibility pursuant to Article 4.5 and all subsequent costs will be prepared as a Deductive Change Order.

9.10 PARTIAL OCCUPANCY OR USE

9.10.1 District's Rights

The District may occupy or use any completed or partially completed portion of the Work at any stage. The District and the Trade Contractor shall agree in writing to the responsibilities assigned to each of them for payments, security, maintenance, heat, utilities, damage to the Work, insurance, the period for correction of the Work, and the commencement of warranties required by the Contract Documents. If District and Trade Contractor cannot agree as to responsibilities such disagreement shall be resolved pursuant to Article 4.6. When the Trade Contractor considers a portion complete, the Trade Contractor shall prepare and submit a Punch List to the District as provided under Article 9.9.1.

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9.10.2 Inspection Prior to Occupancy or Use

Immediately prior to such partial occupancy or use, the District, the Trade Contractor, and the Architect shall jointly inspect the area to be occupied or portion of the Work to be used in order to determine and record the condition of the Work.

9.10.3 No Waiver

Unless otherwise agreed upon, partial occupancy or use of a portion or portions of the Work shall not constitute acceptance of Work not complying with the requirements of the Contract Documents.

9.11 COMPLETION AND FINAL PAYMENT

9.11.1 Final Payment (90% Billing if Substantially Complex Finding is Made and 95% Billing If No Finding is Made)

The following items must be completed before the Final Payment Application will be accepted for processing at Substantial Completion of the Project:

- a. Inspector sign-off of each item in the DSA 152 Project Inspection Card;
- b. The Project has reached the Punch List items under Article 9.9.1.2 and the Project has been determined to be Substantially Complete under Article 1.1.55;
- c. Removal of temporary facilities and services;
- d. Testing, adjusting and balance records are complete;
- e. Removal of surplus materials, rubbish, and similar elements;
- f. Chang over of door locks;
- g. Deductive items pursuant to Article 9.6 and Article 2.2; and,
- h. Completion and submission of all final Change Orders for the Project.

9.11.2 Final Inspection (Punch List Completion)

Trade Contractor shall comply with Punch List procedures under Article 9.9.1, and maintain the presence of Project Superintendent and Project Manager (not replacement project superintendent or project manager) until the Punch List is complete to ensure proper and timely completion of the Punch List. Under no circumstances shall Trade Contractor demobilize its forces prior to completion of the Punch List.

Upon completion of the Work under Article 9.9.1, the Trade Contractor shall notify the District and Architect, who shall again inspect such Work. If the Architect and the District find the Work contained in the Punch List acceptable under the Contract Documents the Work shall have reached Final Completion. Architect shall notify Trade Contractor, who shall then submit to the Architect its Application for Retention Payment. This Application for Retention Payment shall contain any deductions under Article 9.6, including but not limited to incomplete Punch List items under Article 9.9.1.

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Upon receipt and approval of Application for Retention Payment, the Architect shall issue a Form 6 stating that to the best of its knowledge, information, and belief, and on the basis of its observations, inspections, and all other data accumulated or received by the Architect in connection with the Work, such Work has been completed in accordance with the Contract Documents. The District shall thereupon inspect such Work and either accept the Work as complete or notify the Architect and the Trade Contractor in writing of reasons why the Work is not complete. Upon acceptance of the Work of the Trade Contractor as fully complete (which, absent unusual circumstances, will occur when the Punch List items have been satisfactorily completed), the District shall record a Notice of Completion with the County Recorder, and the Trade Contractor shall, upon receipt of payment from the District, pay the amounts due Subcontractors.

If the Architect and the District find that the Work contained in the Punch List is unacceptable, then Trade Contractor shall issue a valued Punch List within 5 days after the date the Punch List time ends. If Trade Contractor does not issue such a list, the District or Architect may issue a valued Punch List to the Trade Contractor and withhold up to 150% of the value of the Punch List Work pursuant to Article 2.2 of this Agreement.

9.11.3 Retainage (100% Billing for the Entire Project)

The retainage, less any amounts disputed by the District or which the District has the right to withhold pursuant to the Contract Documents (including but not limited to incomplete Punch List items under Article 9.9.1), shall be paid after approval by the District of the Application for Retention Payment, after the satisfaction of the conditions set forth in Article 9, the Final Inspection under Article 9.11.2 is completed, and after thirty-five (35) days after the acceptance of the Work and recording of the Notice of Completion by District. No interest shall be paid on any retainage, or on any amounts withheld due to a failure of the Trade Contractor to perform, in accordance with the terms and conditions of the Contract Documents, except as provided to the contrary in any escrow agreement between the District and the Trade Contractor.

- a. Procedures for Application for Retention Payment. The following conditions must be fulfilled prior to release of Retention Payment:
 - i. A full and final waiver or release of all stop notices in connection with the Work shall be submitted by Trade Contractor, including a release of stop notice in recordable form, together with (to the extent permitted by law) a copy of the full and final release of all stop notice rights.
 - ii. The Trade Contractor shall have made all corrections, including all Punch List Items, to the Work which are required to remedy any defects therein, to obtain compliance with the Contract Documents or any requirements of applicable codes and ordinances, or to fulfill any of the orders or directions of District required under the Contract Documents.
 - iii. Each Subcontractor to Trade Contractor shall have delivered to the Trade Contractor all written guarantees, warranties, applications, releases from the Surety and warranty bonds (if applicable) required by the Contract Documents for its portion of the Work.

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- iv. Trade Contractor must have completed all requirements set forth in Article 9.9
- v. Trade Contractor must have issued a Form 6C for the Project.
- vi. The Trade Contractor shall have delivered to the District all manuals and materials required by the Contract Documents.
- vii. The Trade Contractor shall have completed final clean up as required by Article 3.13
- viii. Trade Contractor shall have all deductive items under Article 9.6 and Article 2.2 submitted as part of the Retention Payment.

9.11.4 Recording of a Notice of Completion After Punch List Period and Final Inspection.

When the Work, or designated portion thereof, is complete or the District has completed the Article 9.6 and/or the Article 2.2 process, whichever occurs first, the District will file either a Notice of Completion or a Notice of Completion noting valued Punch List items. Valued Punch List items will be deducted from the Retention Payment.

During the time when Work is being performed on the Punch List, the Project does not meet the definition of “Complete” under Public Contract Code Section 7107(c)(1) even if there is “beneficial occupancy” of the Project since that has been no “cessation of labor” on the Project. Completion of Punch List under this Article is not “testing, startup, or commissioning by the public entity or its agent.” In other words, the continuing Punch List Work is Trade Contractor labor on the Project until each and every item of Punch List Work is complete or the time periods under Article 9.9.1 have expired.

9.11.5 Warranties

Warranties required by the Contract Documents shall commence on the date of Completion of the entire Work. Warranty periods DO NOT commence at Substantial Completion or when a particular Subcontractor work is complete. No additional charges, extras, Change Orders, or Claims may be sought for warranties commencing from the Notice of Completion.

District shall have the right to utilize equipment, test, and operate as necessary for acclimation, or testing without voiding or starting warranties. Taking beneficial occupancy shall not start warranties except in the case where the District agrees, in writing, that warranties shall commence running or where the District is taking phased occupancy of specific buildings or areas and completes separate Punch Lists as further addressed in Article 4.2.7.

9.11.6 Time for Submission of Application for Final Payment and Retention Payment (Unilateral Processing of Final and Retention Payment Application).

If Trade Contractor submits a Final Payment Application which fails to include deductive items under Article 9.6, the District or Architect shall note this defective request for Final Payment Application. The Trade Contractor shall be notified that specific deductive items shall be included in the Final Payment Application. If Trade Contractor either continues to submit the Final Payment Application without deductive items under Article 9.6, or a period of 14 calendar days passes after Trade Contractor is provided written notice of deductive items for inclusion in Final Payment Application, then District may

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either alter the Final Payment Application and recalculate the math on the Final Payment Application to address the Article 9.6 deductive items or process a unilateral Final Payment Application.

9.11.7 Unilateral Release of Retention

After the recordation of the Notice of Completion, or within sixty (60) days following the completion of the Punch List or the expiration of the time for completion of Punch List under Article 9.9.1, if Trade Contractor does not make an Application for Release of Retention, the District may unilaterally release retention less any deducts under Article 9.6 and/or Article 2.2, withholds due to stop notices, or withholdings due to other defective Work on the Project. District may also choose to unilaterally release Retention after deduction of 150% of any disputed items, which may also include items under Article 9.6 and 2.2. If a deduction pursuant to Article 9.6 is made from Retention, a letter deducting specific valued items shall be considered a notice of Default under the terms of the Escrow Agreement.

9.12 SUBSTITUTION OF SECURITIES

The District will permit the substitution of securities in accordance with the provisions of Public Contract Code Section 22300 as set forth in the form contained in the Bid Documents.

ARTICLE 10
PROTECTION OF PERSONS AND PROPERTY

10.1 SAFETY PRECAUTIONS AND PROGRAMS

10.1.1 Trade Contractor Responsibility

The Trade Contractor shall be responsible for all damages to persons or property that occur as a result of its fault or negligence in connection with the prosecution of this Contract and shall take all necessary measures and be responsible for the proper care and protection of all materials delivered and Work performed until completion and final acceptance by the District. All Work shall be solely at the Trade Contractor's risk, with the exception of damage to the Work caused by "acts of God" as defined in Public Contract Code Section 7105(b)(2).

Trade Contractor shall take, and require Subcontractor to take, all necessary precautions for safety of workers on the Work and shall comply with all applicable federal, state, local and other safety laws, standards, orders, rules, regulations, and building codes to prevent accidents or injury to persons on, about, or adjacent to premises where Work is being performed and to provide a safe and healthful place of employment. In addition to meeting all requirements of OSHA, Cal-OSHA, state, and local codes, Trade Contractor shall furnish, erect and properly maintain at all times, as directed by District or Architect or required by conditions and progress of Work, all necessary safety devices, safeguards, construction canopies, signs, audible devices for protection of the blind, safety rails, belts and nets, barriers, lights, and watchmen for protection of workers and the public, and shall post danger signs warning against hazards created by such features in the course of construction. Trade Contractor shall designate a responsible member of its organization on the Work, whose duty shall be to post information regarding protection and obligations of workers and other notices required under occupational safety and health laws, to comply with reporting and other occupational safety requirements, and to protect the life, safety and health of workers. The name and position of person so designated shall be reported to District by Trade Contractor. Trade Contractor shall correct any violations of safety laws, rules, orders, standards, or regulations. Upon the issuance of a citation or notice of violation by the Division of Occupational Safety and Health, such violation shall be corrected promptly.

10.1.2 Subcontractor Responsibility

Trade Contractor shall require that its Subcontractors participate in, and enforce, the safety and loss prevention programs established by Trade Contractor for the Project, which will cover all Work performed by the Trade Contractor and its Subcontractors. Each Trade Contractor shall designate a responsible member of its organization whose duties shall include loss and accident prevention, and who shall have the responsibility and full authority to enforce the program. This person shall attend meetings with the representatives of the various Trade Contractors to ensure that all employees understand and comply with the programs.

10.1.3 Cooperation

All Trade Contractors, Subcontractors and material or equipment suppliers shall cooperate fully with CM, Architect, the District, and all insurance carriers and loss prevention engineers.

10.1.4 Accident Reports

Subcontractors shall immediately, within two (2) days, report in writing to the Trade Contractor all accidents whatsoever arising out of, or in connection with, the performance of the Work, whether on or off the Site, which caused death, personal injury, or property damage, giving full details

and statements of witnesses. In addition, if death or serious injuries or serious damages are caused, the accident shall be reported within four (4) days by telephone or messenger. Trade Contractor shall thereafter immediately, within two (2) days, report the facts in writing to the District and the Architect giving full details of the accident.

10.1.5 First-Aid Supplies at Site

The Trade Contractor will provide and maintain at the Site first-aid supplies which complies with the current Occupational Safety and Health Regulations.

10.1.6 Material Safety Data Sheets and Compliance with Proposition 65

Trade Contractor is required to have material safety data sheets available in a readily accessible place at the job site for any material requiring a material safety data sheet per the Federal "hazard communication" standard, or employees' "right-to-know law." Trade Contractor is also required to properly label any substance brought into the job site, and require that any person working with the material, or within the general area of the material, is informed of the hazards of the substance and follows proper handling and protection procedures.

Trade Contractor is required to comply with the provisions of California Health and Safety Code Section 25249, et seq., which requires the posting and giving of notice to persons who may be exposed to any chemical known to the State of California to cause cancer. Trade Contractor agrees to familiarize itself with the provisions of this Section, and to comply fully with its requirements.

10.1.7 Non-Utilization of Asbestos Material

NO ASBESTOS OR ASBESTOS-CONTAINING PRODUCTS SHALL BE USED IN THIS CONSTRUCTION OR IN ANY TOOLS, DEVICES, CLOTHING, OR EQUIPMENT USED TO EFFECT THIS CONSTRUCTION.

Asbestos and/or asbestos-containing products shall be defined as all items containing, but not limited to, chrysotile, amosite, anthophyllite, tremolite, and antinolite.

Any or all material containing greater than one-tenth of one percent (>.1%) asbestos shall be defined as asbestos-containing material.

All Work or materials found to contain asbestos or Work or material installed with asbestos-containing equipment will be immediately rejected and this Work will be removed at no additional cost to the District.

Decontamination and removal of Work found to contain asbestos or Work installed with asbestos-containing equipment shall be done only under supervision of a qualified consultant, knowledgeable in the field of asbestos abatement and accredited by the Environmental Protection Agency.

The asbestos removal contractor shall be an EPA accredited contractor qualified in the removal of asbestos and shall be chosen and approved by the asbestos consultant, who shall have sole discretion and final determination in this matter.

The asbestos consultant shall be chosen and approved by the District, who shall have sole discretion and final determination in this matter.

The Work will not be accepted until asbestos contamination is reduced to levels deemed acceptable by the asbestos consultant.

Interface of Work under this Contract with Work containing asbestos shall be executed by Trade Contractor at his risk and at his discretion, with full knowledge of the currently accepted standards, hazards, risks, and liabilities associated with asbestos work and asbestos-containing products. By execution of this Contract, the Trade Contractor acknowledges the above and agrees to hold harmless District and its assigns for all asbestos liability which may be associated with this work and agrees to instruct his employees with respect to the above-mentioned standards, hazards, risks, and liabilities.

10.2 SAFETY OF PERSONS AND PROPERTY

10.2.1 Trade Contractor

Trade Contractor shall take reasonable precautions for the safety of, and shall provide reasonable protection to prevent damage, injury, or loss to:

- a. Employees on the Work and other persons who may be affected thereby;
- b. The Work, material, and equipment to be incorporated therein, whether in storage on or off the Site, under the care, custody, or control of Trade Contractor or Trade Contractor's Subcontractors or Sub-subcontractors; and
- c. Other property at the Site or adjacent thereto such as trees, shrubs, lawns, walks, pavement, roadways, structures, and utilities not designated for removal, relocation, or replacement in the course of construction.

Trade Contractor is constructive owner of Project site as more fully discussed in Article 6.2.

10.2.2 Trade Contractor Notices

Trade Contractor shall give notices and comply with applicable laws, ordinances, rules, regulations, and lawful orders of public authorities bearing on the safety of persons or property or their protection from damage, injury, or loss.

10.2.3 Safety Barriers and Safeguards

Trade Contractor shall erect and maintain, as required by existing conditions and performance of the Contract, reasonable safeguards for safety and protection, including posting danger signs and other warnings against hazards, promulgating safety regulations, and notifying owners and users of adjacent sites and utilities.

10.2.4 Use or Storage of Hazardous Material

When use or storage of explosives, other hazardous materials or equipment, or unusual methods are necessary for execution of the Work, Trade Contractor shall exercise utmost care and carry on such activities under supervision of properly qualified personnel. Trade Contractor shall notify the District any time that explosives or hazardous materials are expected to be stored on Site. Location of storage shall be coordinated with the District and local fire authorities.

10.2.5 Protection of Work

Trade Contractor and Trade Contractor's Subcontractors shall continuously protect the Work, the District's property, and the property of others, from damage, injury, or loss arising in connection with operations under the Contract Documents. Trade Contractor and Trade Contractor's Subcontractors, at their own expense, shall make good any such damage, injury, or loss, except such as may be solely due to, or caused by, agents or employees of the District.

Trade Contractor, at Trade Contractor's expense, will remove all mud, water, or other elements as may be required for the proper protection and prosecution of its Work.

Trade Contractor shall take adequate precautions to protect existing roads, sidewalks, curbs, pavements, utilities, adjoining property and structures (including, without limitation, protection from settlement or loss of lateral support), and to avoid damage thereto, and repair any damage thereto caused by construction operations. All permits, licenses, or inspection fees required for such repair Work shall be obtained and paid for by Trade Contractor.

10.2.6 Requirements for Existing Sites

Trade Contractor shall (unless waived by the District in writing):

- a. When performing construction on existing sites, become informed and take into specific account the maturity of the students on the Site; and perform Work which may interfere with school routine before or after school hours, enclose working area with a substantial barricade, and arrange Work to cause a minimum amount of inconvenience and danger to students and faculty in their regular school activities. Trade Contractor shall comply with Specifications and directives of the District regarding the timing of certain construction activities in order to avoid unnecessary interference with school functioning.
- b. Avoid performing any Work that will disturb students during testing.
- c. Provide substantial barricades around any shrubs or trees indicated to be preserved.
- d. Deliver materials to building area over route designated by Architect.
- e. Take preventive measures to eliminate objectionable dust, noise, or other disturbances.
- f. Confine apparatus, the storage of materials, and the operations of workers to limits indicated by law, ordinances, permits or directions of Architect; and not interfere with the Work or unreasonably encumber premises or overload any structure with materials; and enforce all instructions of District and Architect regarding signs, advertising, fires, and smoking and require that all workers comply with all regulations while on the Project site.
- g. Take care to prevent disturbing or covering any survey markers, monuments, or other devices marking property boundaries or corners. If such markers are disturbed by accident, they shall be replaced by an approved land surveyor or civil engineer and all maps and records required therefrom shall be filed with

county and local authorities, at no cost to the District. All filing and plan check fees shall be paid by Trade Contractor.

- h. Provide District on request with Trade Contractor's written safety program and safety plan for each site.

10.2.7 Shoring and Structural Loading

Trade Contractor shall not impose structural loading upon any part of the Work under construction or upon existing construction on or adjacent to the Site in excess of safe limits, or loading such as to result in damage to the structural, architectural, mechanical, electrical, or other components of the Work. The design of all temporary construction equipment and appliances used in construction of the Work and not a permanent part thereof, including, without limitation, hoisting equipment, cribbing, shoring, and temporary bracing of structural steel, is the sole responsibility of Trade Contractor. All such items shall conform with the requirements of governing codes and all laws, ordinances, rules, regulations, and orders of all authorities having jurisdiction. Trade Contractor shall take special precautions, such as shoring of masonry walls and temporary tie bracing of structural steel Work, to prevent possible wind damage during construction of the Work. The installation of such bracing or shoring shall not damage the Work in place or the Work installed by others. Any damage which does occur shall be promptly repaired by Trade Contractor at no cost to the District.

10.2.8 Conformance within Established Limits

Trade Contractor and Trade Contractor's Subcontractors shall confine their construction equipment, the storage of materials, and the operations of workers to the limits indicated by laws, ordinances, permits, and the limits established by the District and CM, and shall not unreasonably encumber the premises with construction equipment or materials.

10.2.9 Subcontractor Enforcement of Rules

Trade Contractor shall enforce the District's and CM's instructions, laws, and regulations regarding signs, advertisements, fires, smoking, the presence of liquor, and the presence of firearms by any person at the Site.

10.2.10 Site Access

Trade Contractor and Trade Contractor's Subcontractors shall use only those ingress and egress routes designated by the District, observe the boundaries of the Site designated by the District, park only in those areas designated by the District, which areas may be on or off the Site, and comply with any parking control program established by the District, such as furnishing license plate information and placing identifying stickers on vehicles.

10.3 EMERGENCIES

10.3.1 Emergency Action

In an emergency affecting the safety of persons or property, the Trade Contractor shall take any action necessary, at the Trade Contractor's discretion, to prevent threatened damage, injury, or loss. Additional compensation or extension of time claimed by the Trade Contractor on account of an emergency shall be determined as provided in Article 7.

10.3.2 Accident Reports

Trade Contractor shall promptly report in writing to the District all accidents arising out of or in connection with the Work, which caused death, personal injury, or property damage, giving full details and statements of any witnesses in conformance with Article 10.1.4. In addition, if death, serious personal injuries, or serious property damages are caused, the accident shall be reported in accordance with Article 10.1.4, immediately by telephone or messenger to the District.

10.4 HAZARDOUS MATERIALS

10.4.1 Discovery of Hazardous Materials

In the event the Trade Contractor encounters or suspects the presence on the job site of material reasonably believed to be asbestos, polychlorinated biphenyl (PCB), or any other material defined as being hazardous by § 25249.5 of the California Health and Safety Code, which has not been rendered harmless, the Trade Contractor shall immediately stop Work in the area affected and report the condition to the District and the Architect in writing, whether or not such material was generated by the Trade Contractor or the District. The Work in the affected area shall not thereafter be resumed, except by written agreement of the District and the Trade Contractor, if in fact the material is asbestos, polychlorinated biphenyl (PCB), or other hazardous material, and has not been rendered harmless. The Work in the affected area shall be resumed only in the absence of asbestos, polychlorinated biphenyl (PCB), or other hazardous material, or when it has been rendered harmless by written agreement of the District and the Trade Contractor.

10.4.2 Hazardous Material Work Limitations

In the event that the presence of hazardous materials is suspected or discovered on the Site (except in cases where asbestos and other hazardous material Work in the Trade Contractor's responsibility), the District shall retain an independent testing laboratory to determine the nature of the material encountered and whether corrective measures or remedial action is required. The Trade Contractor shall not be required pursuant to Article 7 to perform without consent any Work in the affected area of the Site relating to asbestos, polychlorinated biphenyl (PCB), or other hazardous material, until any known or suspected hazardous material has been removed, or rendered harmless, or determined to be harmless by District, as certified by an independent testing laboratory and approved by the appropriate government agency.

10.4.3 Indemnification by Trade Contractor for Hazardous Material Caused by Trade Contractor

In the event the hazardous materials on the Project Site is caused by the Trade Contractor, the Trade Contractor shall pay for all costs of testing and remediation, if any, and shall compensate the District for any additional costs incurred as a result of Trade Contractor's generation of hazardous material on the Project Site. In addition, the Trade Contractor shall defend, indemnify and hold harmless District and its agents, officers, and employees from and against any and all claims, damages, losses, costs and expenses incurred in connection with, arising out of, or relating to, the presence of hazardous material on the Project Site.

10.4.4 Terms of Hazardous Material Provision

The terms of this Hazardous Material provision shall survive the completion of the Work and/or any termination of this Contract.

ARTICLE 11 INSURANCE AND BONDS

11.1 TRADE CONTRACTOR'S LIABILITY INSURANCE

11.1.1 Insurance Requirements

Before the commencement of the Work, the Trade Contractor shall purchase from and maintain in a company or companies lawfully authorized to do business in California with a financial rating of at least an A-VIII status as rated in the most recent edition of Best's Insurance Reports or as amended by the Supplementary General Conditions, such insurance as will protect the District from claims set forth below, which may arise out of or result from the Trade Contractor's Work under the Contract and for which the Trade Contractor may be legally liable, whether such Work are by the Trade Contractor, by a Subcontractor, by anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable. Any required insurance shall not contain any exclusion that applies to the type of work performed by the Trade Contractor under the Contract Documents.

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

11.1.2 Specific Insurance Requirements

Trade Contractor shall take out and maintain and shall require all Subcontractors, if any, whether primary or secondary, to take out and maintain:

Comprehensive General Liability Insurance with a combined single limit per occurrence of not less than \$2,000,000.00 or Commercial General Liability Insurance which provides limits of not less than:

- (a) Per occurrence (combined single limit) \$2,000,000.00
- (b) Project Specific Aggregate (for this Project only) \$2,000,000.00
- (c) Products and Completed Operations (aggregate)..... \$2,000,000.00
- (d) Personal and Advertising Injury Limit \$1,000,000.00
- (e) Sexual Abuse or Molestation \$3,000,000.00

Insurance Covering Special Hazards

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

- (a) Automotive and truck where operated in amounts \$1,000,000.00
- (b) Material Hoist where used in amounts \$1,000,000.00
- (c) Explosion, Collapse and Underground (XCU coverage)..... \$1,000,000.00
- (d) Hazardous Materials \$1,000,000.00

In addition, provide Excess Liability Insurance coverage in the amount of Four Million Dollars (\$4,000,000.00).

11.1.3 Subcontractor Insurance Requirements

The Trade Contractor shall require its Subcontractors to take out and maintain public liability insurance and property damage insurance required under Article 11.1 in like amounts. A “claims made” or modified “occurrence” policy shall not satisfy the requirements of Article 11.1 without prior written approval of the District.

11.1.4 Additional Insured Endorsement Requirements

The Trade Contractor shall name, on any policy of insurance required under Article 11.1, the District, CM, Architect, Inspector, the State of California, their officers, employees, agents, volunteers and independent contractors as additional insureds. Subcontractors shall name the Trade Contractor, the District, Architect, Inspector, the State of California, their officers, employees, agents, volunteers and independent contractors as additional insureds. The Additional Insured Endorsement included on all such insurance policies shall be an ISO CG 20 10 (04/13), or an ISO CG 20 38 (04/13), or their equivalent as determined by the District in its sole discretion, and must state that coverage is afforded the additional insured with respect to claims arising out of operations performed by or on behalf of the insured. If the additional insureds have other insurance which is applicable to the loss, such other insurance shall be on an excess or contingent basis. The insurance provided by the Trade Contractor pursuant to 11.1 must be designated in the policy as primary to any insurance obtained by the District. The amount of the insurer’s liability shall not be reduced by the existence of such other insurance.

11.2 WORKERS' COMPENSATION INSURANCE

During the term of this Contract, the Trade Contractor shall provide workers' compensation and employer's liability insurance for all of the Trade Contractor's employees engaged in Work under this Contract on or at the Site of the Project and, in case any of the Trade Contractor's Work is subcontracted, the Trade Contractor shall require the Subcontractor to provide workers' compensation insurance for all the Subcontractor's employees engaged in Work under the subcontract. Any class of employee or employees not covered by a Subcontractor's insurance shall be covered by the Trade Contractor's insurance. In case any class of employees engaged in Work under this Contract on or at the Site of the Project is not protected under the Workers' Compensation laws, the Trade Contractor shall provide or cause a Subcontractor to provide insurance coverage for the protection of those employees not otherwise protected. The Trade Contractor shall file with the District certificates of insurance as required under Article 11.7 and in compliance with Labor Code § 3700.

Workers' compensation limits as required by the Labor Code, but not less than \$1,000,000 and employers' liability limits of \$1,000,000 per accident for bodily injury or disease.

11.3 BUILDER'S RISK/ "ALL RISK" INSURANCE

Trade Contractor is not required to provide Builders Risk under this Article.

11.3.1 DISTRICT is to provide coverage in the amount of the full value of the project for losses due to fire, vandalism and theft with a maximum deductible of five thousand dollars per loss. Each contractor is responsible for a share of the deductible proportionate to his/her portion of the total loss. Any portions of CONTRACTOR's work and materials stored offsite are not to be covered under such insurance. In addition, CONTRACTOR is required to provide evidence that stored materials are covered under a separate policy. Property and equipment owned by Contractors or others which are not to be installed in the project are not afforded coverage by the DISTRICT's insurance. The CONTRACTOR shall be responsible for the securing and maintaining of fire insurance and other insurance on any tool, equipment, or supplies which are expected to remain his property. Coverage under the DISTRICT's policy is not construed to extend to earthquake, flood, pollution, and other commonly excluded perils.

The DISTRICT and CONTRACTOR waive all rights against each other and any of their subcontractors, sub-subcontractors, agents and employees, each of the other, and the ARCHITECT, ARCHITECT's consultants, the CONSTRUCTION MANAGER, separate contractors, if any and any of their subcontractors, sub-subcontractors, agents and employees, for damages caused by fire or other perils to the extent covered by insurance obtained pursuant to this Article or other property insurance applicable to the work, except such rights as they have to proceeds of such insurance. The DISTRICT or CONTRACTOR, as appropriate shall require separate contractors if any, and the subcontractors, sub-subcontractors, agents and employees of any of them by appropriate agreements, similar waivers each in favor of other parties enumerated herein. The policies shall provide such waivers of subrogation by endorsement or otherwise. A waiver of subrogation shall be effective as to a person or entity even though that person or entity would otherwise have a duty of indemnification contractual or otherwise, did not pay the insurance premium directly or indirectly, and whether or not the person or entity had an insurable interest in the property damaged.

11.4 FIRE INSURANCE

Before the commencement of the Work, the Trade Contractor shall procure, maintain, and cause to be maintained at the Trade Contractor's expense, fire insurance on all Work subject to loss

or damage by fire. The amount of fire insurance shall be sufficient to protect the Project against loss or damage in full until the Work is accepted by the District. This requirement may be waived upon confirmation by the District that such coverage is provided under the Builder's Risk Insurance being provided.

11.5 AUTOMOBILE LIABILITY

11.5.1 The District, Architect and Construction Manager, Inspectors, their directors, officers, employees, agents and volunteers shall be covered as additional insureds with respect to the ownership, operation, maintenance, use, loading or unloading of any auto owned, leased, hired or borrowed by the Contractor or for which the Contractor is responsible. Such insurance coverage shall be primary and non-contributory insurance as respects the District, Architect, Construction Manager, Project Inspector, their directors, officers, employees, agents and volunteers, or if excess, shall stand in an unbroken chain of coverage excess of the Contractor's scheduled underlying coverage. Any insurance or self-insurance maintained by the District, Architect, Construction Manager, Project Inspector, their directors, officers, employees, agents and volunteers shall be excess of the Contractor's insurance and shall not be called upon to contribute with it. The insurer shall agree to waive all rights of subrogation against the District, Architect, Construction Manager, Project Inspector, their directors, officers, employees, agents and volunteers for losses paid under the terms of the insurance policy that arise from Work performed by the Contractor.

11.5.2 Insurance Services Office Business Auto Coverage Form Number CA 0001, Code 1 (any auto) is required. Comprehensive Automobile Liability insurance to include all autos, owned, non-owned, and hired, with limits of \$1,000,000 per accident for bodily injury and property damage.

11.6 OTHER INSURANCE

The Trade Contractor shall provide all other insurance required to be maintained under applicable laws, ordinances, rules, and regulations.

11.7 PROOF OF INSURANCE

The Trade Contractor shall not commence Work nor shall it allow any Subcontractor to commence Work under this Contract until all required insurance and certificates have been obtained and delivered in duplicate to the District for approval subject to the following requirements:

- a. Certificates and insurance policies shall include the following clause:

“This policy and any coverage shall not be suspended, voided, non-renewed, canceled, or reduced in required limits of liability or amounts of insurance or coverage until notice has been mailed via certified mail to the District and CM. Date of cancellation or reduction may not be less than thirty (30) days after the date of mailing notice.”
- b. Certificates of insurance shall state in particular those insured, the extent of insurance, location and operation to which the insurance applies, the expiration date, and cancellation and reduction notices.
- c. Certificates of insurance shall clearly state that the District and the Architect are named as additional insureds under the policy described and that such insurance policy shall be primary to any insurance or self-insurance maintained by District.

- d. The Trade Contractor and its Subcontractors shall produce a certified copy of any insurance policy required under this Section upon written request of the District.

11.8 COMPLIANCE

In the event of the failure of Trade Contractor to furnish and maintain any insurance required by this Article 11, the Trade Contractor shall be in default under the Contract. Compliance by Trade Contractor with the requirement to carry insurance and furnish certificates or policies evidencing the same shall not relieve the Trade Contractor from liability assumed under any provision of the Contract Documents, including, without limitation, the obligation to defend and indemnify the District and the Architect.

11.9 WAIVER OF SUBROGATION

Trade Contractor waives (to the extent permitted by law) any right to recover against the District for damages to the Work, any part thereof, or any and all claims arising by reason of any of the foregoing, but only to the extent that such damages and/or claims are covered by property insurance and only to the extent of such coverage (which shall exclude deductible amounts) by insurance actually carried by the District.

The provisions of this Section are intended to restrict each party to recovery against insurance carriers only to the extent of such coverage and waive fully and for the benefit of each, any rights and/or claims which might give rise to a right of subrogation in any insurance carrier. The District and the Trade Contractor shall each obtain in all policies of insurance carried by either of them, a waiver by the insurance companies thereunder of all rights of recovery by way of subrogation for any damages or claims covered by the insurance.

11.10 PERFORMANCE AND PAYMENT BONDS

11.10.1 Bond Requirements

Unless otherwise specified in the Supplemental Conditions, prior to commencing any portion of the Work, the Trade Contractor shall furnish separate Payment and Performance Bonds for its portion of the Work which shall cover 100% faithful performance of and payment of all obligations arising under the Contract Documents and/or guaranteeing the payment in full of all claims for labor performed and materials supplied for the Work. All bonds shall be provided by a corporate Surety authorized and admitted to transact business in California as sureties.

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

11.10.2 Surety Qualification

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

11.10.3 Alternate Surety Qualifications

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

ARTICLE 12
UNCOVERING AND CORRECTION OF WORK

12.1 COMPLIANCE WITH TITLE 24 INSTALLATION REQUIREMENTS

Trade Contractor is aware of the requirements governing Trade Contractor's Work under title 24 Section 4-343 which provides, in pertinent part:

4-343. Duties of the Contractor.

(a) **Responsibilities.** It is the duty of the contractor to complete the work covered by his or her contract in accordance with the approved Plans and Specifications therefore. The contractor in no way is relieved of any responsibility by the activities of the architect, engineer, Inspector or DSA in the performance of such duties.

(b) **Performance of the Work.** The contractor shall carefully study the approved Plans and Specifications and shall plan a schedule of operations well ahead of time. If at any time it is discovered that Work is being done which is not in accordance with the approved Plans and Specifications, the contractor shall correct the Work immediately. All inconsistencies or items which appear to be in error in the Plans and Specifications shall be promptly called to the attention of the architect or registered engineer, through the Inspector, for interpretation or correction. In no case, however, shall the instruction of the architect or registered engineer be construed to cause Work to be done which is not in conformity with the approved Plans, Specifications, and Change Orders. The contractor must notify the Project Inspector, in advance, of the commencement of construction of each and every aspect of the Work.

12.1.1 Issuance of Notices of Non-Compliance

The Inspector may issue a Notice of Non-Compliance on the Project indicating deviation from Plans and Specifications. It is Trade Contractor's responsibility to correct all deviations from the approved Plans and Specifications unless the District has issued an Immediate Change Directive. In such case, the Trade Contractor shall proceed with the Work with the understandings of the District as set forth in the ICD and as specifically noted in Article 7.3.

12.2 SPECIAL NOTICE OF AMERICANS WITH DISABILITIES ACT

Some of the requirements in the Plans and Specifications are meant to comply with the Americans with Disabilities Act ("ADA"). The requirements of the ADA are technical in nature and may appear to be minor in nature (i.e. whether a walkway or ramp has a 2% cross-slope). Trade Contractor is warned that even the slightest deviation from the specific requirements from the ADA is considered a Civil Rights violation and subjects the District to fines of three times actual damages sustained by a handicap individual or up to \$4,000 per violation and attorney's fees required to enforce the ADA violation. As a result of the significant liability and exposure associated with ADA aspects of the Contract, Trade Contractor shall take special care to meet all ADA requirements detailed in the Plans and Specifications. Failure to comply with ADA rules that results in a Notice of Non-Compliance shall be repaired to meet ADA requirements promptly. In addition, any ADA violations that are not identified by Inspector or Architect that are later identified shall be repaired and charged back to the Trade Contractor through a Deductive Change Order.

12.2.1 Indemnification of ADA Claims

Trade Contractor shall indemnify, hold harmless and defend the District from ADA claims arising from the failure to comply with the Plans and Specifications. Further, any withholdings for ADA violations under Article 9.6 shall include potential redesign costs and an accelerated repair costs due to the potential for ADA claims arising from DSA posting of ADA violations on the Project.

12.3 UNCOVERING OF WORK

12.3.1 Uncovering Work for Required Inspections

Work shall not be covered without the Inspector's review and the Architect's knowledge that the Work conforms with the requirements of the approved Plans and Specifications (except in the case of an ICD under Article 7.3). Inspector must be timely notified of inspections and of new areas so Work can be inspected at least 48 hours before opening a new area (For example, see DSA Form 156 for Commencement/Completion of Work Notification which requires "at least 48 hour" advance notification of a new area). An Inspector must comply with DSA protocols for signing each category or phase of Work under DSA Form 152 (in compliance with the Form 152 Manual) or a Notice of Deviation (DSA Form 154) will be issued requiring the Work that was not inspected be uncovered for inspection. Thus, if a portion of the Work is covered without inspection or Architect approval, is subject to a Notice of Non-Compliance for being undertaken without inspection, or otherwise not in compliance with the Contract Documents, after issuance of a Written Notice of Non-Compliance (Form 154) or a written notice to uncover Work, Trade Contractor shall promptly uncover all Work (which includes furnishing all necessary facilities, labor, and material) for the Inspector's or the Architect's observation and such Work shall be replaced at the Trade Contractor's expense without change in the Contract Sum or Time.

12.3.2 Costs for Inspections Not Required

If a portion of the Work has been covered is believed to be Non-Conforming to the Plans and Specifications, even if the Form 152 for the category of Work has been signed by the Inspector, the Inspector or the Architect may request to see such Work, and it shall be promptly uncovered by the Trade Contractor. If such Work is in accordance with the Contract Documents, costs of uncover and replacement shall, by appropriate Change Order and shall, be charged to the District. If such Work is not in accordance with Contract Documents, the Trade Contractor shall be responsible for all costs to uncover the Work, delays incurred to uncover the Work, and Trade Contractor shall pay all costs to correct the Non-Conforming construction condition unless the condition was caused by the District or a separate contractor, in which event the District shall be responsible for payment of such costs to the Trade Contractor.

12.4 CORRECTION OF WORK

12.4.1 Correction of Rejected Work

The Trade Contractor shall promptly correct the Work rejected by the Inspector or the District upon recommendation of the Architect as failing to conform to the requirements of the Contract Documents, whether observed before or after Completion and whether or not Fabricated, installed, or completed. The Trade Contractor shall bear costs of correcting the rejected Work, including cost for delays that may be incurred by other Trade Contractor or Subcontractors, the cost for additional testing, inspections, and compensation for the Inspector's or the Architect's services and expenses made necessary thereby (including costs for preparing a CCD, DSA CCD review fees, and additional inspection and special inspection costs).

12.4.2 One-Year Warranty Corrections

If, within one (1) year after the date of Completion of the Work or a designated portion thereof, or after the date for commencement of warranties established under Article 9.11.5 or by the terms of an applicable special warranty required by the Contract Documents, any of the Work is found to be not in accordance with the requirements of the Contract Documents, the Trade Contractor shall correct it promptly after receipt of written notice from the District to do so unless the District has previously given the Trade Contractor a written acceptance of such condition. This period of one (1) year shall be extended with respect to portions of the Work first performed after Completion by the period of time between Completion and the actual performance of the Work. This obligation under this Article 12.4.2 shall survive acceptance of the Work under the Contract and Termination of the Contract. The District shall give such notice promptly after discovery of the condition.

12.4.3 District's Rights if Trade Contractor Fails to Correct

If the Trade Contractor fails to correct nonconforming Work within a reasonable time, the District may correct the Work and seek a Deductive Change Order, pursuant to Article 9.6 or Article 2.2.

**ARTICLE 13
MISCELLANEOUS PROVISIONS**

13.1 GOVERNING LAW

The Contract shall be governed by the law of the place where the Project is located.

13.2 SUCCESSORS AND ASSIGNS

The District and the Trade Contractor respectively bind themselves, their partners, successors, assigns, and legal representatives to the other party hereto and to partners, successors, assigns, and legal representatives of such other party in respect to covenants, agreements, and obligations contained in the Contract Documents. Neither party to the Contract shall assign the Contract as a whole without written consent of the other. If either party attempts to make such an assignment without such consent, that party shall nevertheless remain legally responsible for all obligations under the Contract.

13.3 WRITTEN NOTICE

In the absence of specific notice requirements in the Contract Documents, written notice shall be deemed to have been duly served if delivered in person to the individual, member of the firm or entity, or to an officer of the corporation for which it was intended, or if delivered at or sent by registered or certified mail to the last business address known to the party giving notice.

13.4 RIGHTS AND REMEDIES

13.4.1 Duties and Obligations Cumulative

Duties and obligations imposed by the Contract Documents and rights and remedies available thereunder shall be in addition to and not a limitation of duties, obligations, rights, and remedies otherwise imposed or available by law.

13.4.2 No Waiver

No action or failure to act by the Inspector, the District, or the Architect shall constitute a waiver of a right or duty afforded them under the Contract Documents, nor shall such action or failure to act constitute approval of or acquiescence in a breach thereunder, except as may be specifically agreed in writing.

13.5 TESTS AND INSPECTIONS

13.5.1 Compliance

Tests, inspections, and approvals of portions of the Work required by the Contract Documents will comply with Division 1, Title 24, and with all other laws, ordinances, rules, regulations, or orders of public authorities having jurisdiction.

13.5.2 Independent Testing Laboratory

The District will select and pay an independent testing laboratory to conduct all tests and inspections. Selection of the materials required to be tested shall be made by the laboratory or the District's representative and not by the Trade Contractor. See Articles 3.14.1 and 4.3.6 regarding costs or expenses of inspection or testing incurred outside of the Project Site.

13.5.3 Advance Notice to Inspector

The Trade Contractor shall notify the Inspector a sufficient time in advance of its readiness for required observation or inspection so that the Inspector may arrange for same. The Trade Contractor shall notify the Inspector a sufficient time in advance of the manufacture of material to be supplied under the Contract Documents which must, by terms of the Contract Documents, be tested in order that the Inspector may arrange for the testing of the material at the source of supply.

13.5.4 Testing Off-Site

Any material shipped by the Trade Contractor from the source of supply, prior to having satisfactorily passed such testing and inspection or prior to the receipt of notice from said Inspector that such testing and inspection will not be required, shall not be incorporated in the Work.

13.5.5 Additional Testing or Inspection

If the Inspector, the Architect, the District, or public authority having jurisdiction determines that portions of the Work require additional testing, inspection, or approval not included under Article 13.5.1, the Inspector will, upon written authorization from the District, make arrangements for such additional testing, inspection, or approval. The District shall bear such costs except as provided in Articles 13.5.6 and 13.5.7.

13.5.6 Costs for Retesting

If such procedures for testing, inspection, or approval under Articles 13.5.1 and 13.5.2 reveal failure of the portions of the Work to comply with requirements established by the Contract Documents, the Trade Contractor shall bear all costs arising from such failure, including those of re-testing, re-inspection, or re-approval, including, but not limited to, compensation for the Architect's services and expenses. Any such costs shall be paid by the District, invoiced to the Trade Contractor, and deducted from the next Progress Payment.

13.5.7 Costs for Premature Test

In the event the Trade Contractor requests any test or inspection for the Project and is not completely ready for the inspection, the Trade Contractor shall be invoiced by the District for all costs and expenses resulting from that testing or inspection, including, but not limited to, the Inspector's and Architect's fees and expenses, and the amount of the invoice shall be deducted from the next Progress Payment.

13.6 TRENCH EXCAVATION

13.6.1 Trenches Greater Than Five Feet

Pursuant to Labor Code Section 6705, if the Contract Price exceeds \$25,000 and involves the excavation of any trench or trenches five (5) feet or more in depth, the Trade Contractor shall, in advance of excavation, submit to the District or a registered civil or structural engineer employed by the District or Architect, a detailed plan showing the design of shoring for protection from the hazard of caving ground during the excavation of such trench or trenches.

13.6.2 Excavation Safety

If such plan varies from the Shoring System Standards established by the Construction Safety Orders, the plan shall be prepared by a registered civil or structural engineer, but in no case shall

such plan be less effective than that required by the Construction Safety Orders. No excavation of such trench or trenches shall be commenced until said plan has been accepted by the District or by the person to whom authority to accept has been delegated by the District.

13.6.3 No Tort Liability of District

Pursuant to Labor Code § 6705, nothing in this Article shall impose tort liability upon the District or any of its employees.

13.6.4 No Excavation without Permits

The Trade Contractor shall not commence any excavation Work until it has secured all necessary permits including the required CAL OSHA excavation/shoring permit. Any permits shall be prominently displayed on the Site prior to the commencement of any excavation.

13.7 WAGE RATES, TRAVEL, AND SUBSISTENCE

13.7.1 Wage Rates

Pursuant to the provisions of Article 2 (commencing at § 1720), Chapter 1, Part 7, Division 2, of the Labor Code, the District has obtained the general prevailing rate of per diem wages and the general prevailing rate for holiday and overtime work in the locality in which this public works project is to be performed for each craft, classification, or type of worker needed for this Project from the Director of the Department of Industrial Relations (“Director”). These rates are on file at the administrative office of the District and are also available from the Director of the Department of Industrial Relations. Copies will be made available to any interested party on request. The Trade Contractor shall post a copy of such wage rates at appropriate, conspicuous, weatherproof points at the Site.

Any worker employed to perform Work on the Project, but such Work is not covered by any classification listed in the published general prevailing wage rate determinations or per diem wages determined by the Director of the Department of Industrial Relations, shall be paid not less than the minimum rate of wages specified therein for the classification which most nearly corresponds to the employment of such person in such classification.

13.7.2 Holiday and Overtime Pay

Holiday and overtime work, when permitted by law, shall be paid for at the rate set forth in the prevailing wage rate determinations issued by the Director of the Department of Industrial Relations or at least one and one-half (1½) times the specified basic rate of per diem wages, plus employer payments, unless otherwise specified in the Contract Documents or authorized by law.

13.7.3 Wage Rates Not Affected by Subcontracts

The Trade Contractor shall pay and shall cause to be paid each worker engaged in the execution of the Work on the Project not less than the general prevailing rate of per diem wages determined by the Director, regardless of any contractual relationship which may be alleged to exist between the Trade Contractor or any Subcontractor and such workers.

13.7.4 Per Diem Wages

The Trade Contractor shall pay and shall cause to be paid to each worker needed to execute the Work on the Project per diem wages including, but not limited to, employer payments for

health and welfare, pensions, vacation, travel time and subsistence pay as provided for in Labor Code §1773.1.

13.7.5 Forfeiture and Payments

Pursuant to Labor Code §1775, the Trade Contractor shall forfeit to the District, not more than Two Hundred Dollars (\$200.00) for each calendar day, or portion thereof, for each worker paid less than the prevailing wages rates as determined by the Director of the Department of Industrial Relations, for the work or craft in which the worker is employed for any Work done under the Agreement by the Trade Contractor or by any Subcontractor under it. The amount of the penalty shall be determined by the Labor Commissioner and shall be based on consideration of: (1) whether the Trade Contractor or Subcontractor's failure to pay the correct rate of per diem wages was a good faith mistake and, if so, the error was promptly and voluntarily correct upon being brought to the attention of the Trade Contractor or Subcontractor; and (2) whether the Trade Contractor or Subcontractor has a prior record of failing to meet its prevailing wage obligations.

13.7.6 Monitoring and Enforcement by Labor Commissioner

Monitoring and enforcement of the prevailing wage laws and related requirements will be performed by the Labor Commissioner/ Department of Labor Standards Enforcement (DLSE). The Contractor and all Subcontractors shall be required to furnish, at least monthly, certified payroll records directly to the Labor Commissioner in accordance with Labor Code section 1771.4. All payroll records shall be furnished in a format required by the Labor Commissioner. The Contractor and all Subcontractors must sign up for, and utilize, the Labor Commissioner's electronic certified payroll records submission system. The District will have direct and immediate access to all CPRs for the Project that are submitted through the Labor Commissioner's system. The District can use this information for any appropriate purpose, including monitoring compliance, identifying suspected violations, and responding to Public Records Act requests.

The Labor Commissioner/ DLSE may conduct various compliance monitoring and enforcement activities including, but not limited to, confirming the accuracy of payroll records, conducting worker interviews, conducting audits, requiring submission of itemized statements prepared in accordance with Labor Code section 226, and conducting random in-person inspections of the Project site ("On-Site Visits"). On-Site Visits may include inspections of records, inspections of the Work site and observation of work activities, interviews of workers and others involved with the Project, and any other activities deemed necessary by the Labor Commissioner/DLSE to ensure compliance with prevailing wage requirements. The Labor Commissioner/DLSE shall have free access to any construction site or other place of labor and may obtain any information or statistics pertaining to the lawful duties of the Labor Commissioner/DLSE.

Any lawful activities conducted or any requests made by the Labor Commissioner/DLSE shall not be the basis for any delays, claims, costs, damages or liability of any kind against the District by the Contractor. Contractor and all Subcontractors shall cooperate and comply with any lawful requests by the Labor Commissioner/ DLSE. The failure of the Labor Commissioner, DLSE, or any other entity related to the Department of Industrial Relations to comply with any requirement imposed by the California Code of Regulations, Title 8, Chapter 8 shall not of itself constitute a defense to the failure to pay prevailing wages or to comply with any other obligation imposed by Division 2, Part 7, Chapter 1 of the Labor Code.

Prior to commencing any Work on the Project, the Contractor shall post the required notice/poster required under the California Code of Regulations and Labor Code section 1771.4 in both

English and Spanish at a conspicuous, weatherproof area at the Project site. The required notice/poster is available on the Labor Commissioner's website.

13.8 RECORDS OF WAGES PAID

13.8.1 Payroll Records

- a. Pursuant to §1776 of the Labor Code, the Trade Contractor and Subcontractor shall keep an accurate payroll record showing the name, address, social security number, work classification and straight time and overtime hours worked each day and week, and the actual per diem wages paid to each journeyman, apprentice, worker or other employee employed by him or her in connection with the Project.

All payroll records as specified in Labor Code §1776 of the Trade Contractor and all Subcontractors shall be certified and furnished directly to the Labor Commissioner in accordance with Labor Code §1771.4(a)(3) on a monthly basis (or more frequently if required by the District or the Labor Commissioner) and in a format prescribed by the Labor Commissioner. Payroll records as specified in Labor Code §1776 shall be certified and submitted to the District with each application for payment. All payroll records shall be available for inspection at all reasonable hours at the principal office of the Trade Contractor on the following basis:

1. A certified copy of an employee's payroll record shall be made available for inspection or furnished to the employee or his or her authorized representative on request.
 2. A certified copy of all payroll records shall be made available for inspection or furnished upon request to a representative of District, the Division of Labor Standards Enforcement or the Division of Apprenticeship Standards of the Department of Industrial Relations.
 3. A certified copy of all payroll records shall be made available upon request by the public for inspection or for copies thereof. However, a request by the public shall be made through the District, the Division of Apprenticeship Standards or the Division of Labor Standards Enforcement. If the requested payroll records have not been provided pursuant to Paragraph (2) above, the requesting party shall, prior to being provided the records, reimburse the costs, according to law for the preparation by the Trade Contractor, Subcontractor(s), and the entity through which the request was made. The public shall not be given access to such records at the principal office of the Trade Contractor.
- b. The certified payroll records shall be on forms provided by the Division of Labor Standards Enforcement or shall contain the same information as the forms provided by the Division of Labor Standards Enforcement.
 - c. The Trade Contractor or Subcontractor(s) shall file a certified copy of all payroll records with the entity that requested such records within 10 calendar days after receipt of a written request.

- d. Any copy of records made available for inspection as copies and furnished upon request to the public or any public agency by the District, the Division of Apprenticeship Standards or the Division of Labor Standards Enforcement shall be marked or obliterated to prevent disclosure of an individual's name, address and social security number. The name and address of the Trade Contractor awarded the Contract or the Subcontractor(s) performing the Contract shall not be marked or obliterated. Any copy of records made available for inspection by, or furnished to, a joint labor-management committee established pursuant to the federal Labor Management Cooperation Act of 1978 (Section 175a of Title 29 of the United States Code) shall be marked or obliterated only to prevent disclosure of an individual's name and social security number. Notwithstanding any other provision of law, agencies that are included in the Joint Enforcement Strike Force on the Underground Economy established pursuant to Section 329 of the Unemployment Insurance Code and other law enforcement agencies investigating violations of law shall, upon request, be provided non-redacted copies of certified payroll records.
- e. The Trade Contractor shall inform the District of the location of all payroll records, including the street address, city and county, and shall, within five business days, provide a notice of a change of location and address.
- f. The Trade Contractor or Subcontractor(s) shall have 10 calendar days in which to comply subsequent to receipt of a written notice requesting payroll records. In the event that the Trade Contractor or Subcontractor(s) fails to comply within the 10-day period, the Trade Contractor or Subcontractor(s) shall, as a penalty to the District, forfeit One Hundred Dollars (\$100.00) for each calendar day, or portion thereof, for each worker, until strict compliance is effectuated. Upon the request of the Division of Apprenticeship Standards or the Division of Labor Standards Enforcement, these penalties shall be withheld from progress payments then due.

Responsibility for compliance with this Article shall rest upon the Trade Contractor.

13.8.2 Withholding of Contract Payments & Penalties

The District may withhold or delay contract payments to the Trade Contractor and/or any Subcontractor if:

- a. The required prevailing rate of per diem wages determined by the Director of the Department of Industrial Relations is not paid to all workers employed on the Project; or
- b. The Trade Contractor or its Subcontractor(s) fail to submit all required certified payroll records with each application for payment, but not less than once per month; or
- c. The Trade Contractor or its Subcontractor(s) submit incomplete or inadequate payroll records; or
- d. The Trade Contractor or its Subcontractor(s) fail to comply with the Labor Code requirements concerning apprentices; or
- e. The Trade Contractor or Its Subcontractor(s) fail to comply with any applicable state laws governing workers on public works projects.

13.9 APPRENTICES

13.9.1 Apprentice Wages and Definitions

All apprentices employed by the Trade Contractor to perform services under the Contract shall be paid the standard wage paid to apprentices under the regulations of the craft or trade for which he or she is employed, and as determined by the Director of the Department of Industrial Relations, and shall be employed only at the craft or trade to which he or she is registered. Only apprentices, as defined in §3077 of the Labor Code, who are in training under apprenticeship standards that have been approved by the Chief of the Division of Apprenticeship Standards and who are parties to written apprenticeship agreements under Chapter 4 (commencing with §3070) of Division 3, are eligible to be employed under this Contract. The employment and training of each apprentice shall be in accordance with the apprenticeship standards and apprentice agreements under which he or she is training, or in accordance with the rules and regulations of the California Apprenticeship Council.

13.9.2 Employment of Apprentices

Trade Contractor agrees to comply with the requirements of Labor Code §1777.5. The Trade Contractor awarded the Project, or any of Trade Contractor's Subcontractor under him or her, when performing any of the Work under the Contract or subcontract, employs workers in any apprenticeable craft or trade, the Trade Contractor and its Subcontractor shall employ apprentices in the ratio set forth in Labor Code §1777.5. The Trade Contractor or any Subcontractor must apply to any apprenticeship program in the craft or trade that can provide apprentices to the Project site for a certificate approving the contractor or subcontractor under the apprenticeship standards for the employment and training of apprentices in the area or industry affected. However, the decision of the apprenticeship program to approve or deny a certificate shall be subject to review by the Administrator of Apprenticeship. The apprenticeship program or programs, upon approving the Trade Contractor or Subcontractor, shall arrange for the dispatch of apprentices to the Trade Contractor or Subcontractor upon the Trade Contractor's or Subcontractor's request. "Apprenticeable craft or trade" as used in this Article means a craft or trade determined as an apprenticeable occupation in accordance with the rules and regulations prescribed by the California Apprenticeship Council. The ratio of work performed by apprentices to journeyman employed in a particular craft or trade on the Project shall be in accordance with Labor Code §1777.5.

13.9.3 Submission of Contract Information

Prior to commencing Work on the Project, the Trade Contractor and Subcontractors shall submit contract award information to the applicable apprenticeship program(s) that can supply apprentices to the Project and make the request for the dispatch of apprentices in accordance with the Labor Code. The information submitted shall include an estimate of journeyman hours to be performed under the Contract, the number of apprentices proposed to be employed, and the approximate dates the apprentices would be employed. A copy of this information shall also be submitted to the District if requested. Within 60 days after concluding Work on the Project, the Trade Contractor and Its Subcontractors shall submit to the District, if requested, and to the apprenticeship program a verified statement of the journeyman and apprentice hours performed on the Project.

13.9.4 Apprentice Fund

The Trade Contractor or any of its Subcontractor under him or her, who, in performing any of the Work under the Contract, employs journeymen or apprentices in any apprenticeable craft or trade shall contribute to the California Apprenticeship Council the same amount that the Director determines is the prevailing amount of apprenticeship training contributions in the area of the Project. The Trade Contractor and its Subcontractors may take as a credit for payments to the California

Apprenticeship Council any amounts paid by the Trade Contractor or its Subcontractor to an approved apprenticeship program that can supply apprentices to the Project. The Trade Contractor and its Subcontractors may add the amount of the contributions in computing his or her bid for the Contract.

13.9.5 Trade Contractor Compliance

The responsibility of compliance with Article 13 and §1777.5 of the Labor Code for all apprenticeable occupations is with the Trade Contractor. Any Trade Contractor or Subcontractor that knowingly violates the provisions of this Article or Labor Code §1777.5 shall be subject to the penalties set forth in Labor Code §1777.7.

13.10 ASSIGNMENT OF ANTITRUST CLAIMS

13.10.1 Application

Pursuant to Government Code § 4551, in entering into a public works contract or a subcontract to supply goods, services, or materials pursuant to a public works contract, the Trade Contractor or Subcontractor offers and agrees to assign to the District all rights, title, and interest in and to all causes of action it may have under Section 4 of the Clayton Act, (15 U.S.C. § 15) or under the Cartwright Act (Chapter 2 [commencing with § 16700] of Part 2 of Division 7 of the Business and Professions Code), arising from the purchase of goods, services, or materials pursuant to the public works contract or the subcontract. This assignment shall be made and become effective at the time the awarding body tenders Retention Payment to the Trade Contractor, without further acknowledgment by the parties. If the District receives, either through judgment or settlement, a monetary recovery for a cause of action assigned under Chapter 11 (commencing with § 4550) of Division 5 of Title 1 of the Government Code, the assignor shall be entitled to receive reimbursement for actual legal costs incurred and may, upon demand, recover from the District any portion of the recovery, including treble damages, attributable to overcharges that were paid by the assignor but were not paid by the District as part of the bid price, less the expenses incurred in obtaining that portion of the recovery.

13.10.2 Assignment of Claim

Upon demand in writing by the assignor, the District shall, within one (1) year from such demand, reassign the cause of action assigned pursuant to this Article if the assignor has been or may have been injured by the violation of law for which the cause of action arose and the District has not been injured thereby or the District declines to file a court action for the cause of action.

13.11 STATE AND DISTRICT CONDUCTED AUDITS

Pursuant to and in accordance with the provisions of Government Code § 10532, or any amendments thereto, all books, records, and files of the District, the Trade Contractor, or any Subcontractor connected with the performance of this Contract involving the expenditure of state funds in excess of Ten Thousand Dollars (\$10,000.00), including, but not limited to, the administration thereof, shall be subject to the examination and audit of the Office of the Auditor General of the State of California for a period of five (5) years after Retention Payment is made or a Notice of Completion is Recorded, whichever occurs first. Trade Contractor shall preserve and cause to be preserved such books, records, hard drives, electronic media, and files for the audit period.

Pursuant to the remedies under Public Contract Code Section 9201 and Government Code Section 930.2, Trade Contractor, through execution of this Agreement, also agrees the District shall have the right to review and audit, upon reasonable notice, the books and records of the Trade Contractor concerning any monies associated with the Project. The purpose of this "Audit" is to quickly and

efficiently resolve Disputes based on the actual costs incurred and to reduce the uncertainty in resolving Disputes with limited information. The District shall perform any audits at its own cost and any such audit shall be performed by an independent auditor, having no direct or indirect relationship with the functions or activities being audited or with the business conducted by the Trade Contractor or District. In the event the independent auditor determines that Change Orders, response to Request for Proposals, Claims, Appeal of Claims, or other requests for payment are in error, or has any other concerns or questions, the Auditor shall report the results of the Audit findings to the District and provide a copy to the Trade Contractor after giving the District Board the opportunity for at least 10 days review. If the Trade Contractor disputes the findings of the independent auditor, such dispute shall be handled in the manner set forth under Article 4.6.2 entitled Disputes.

If Trade Contractor having agreed to the terms of this Contract fails to produce books or records requested by Auditor, such failure to produce books or records that were required to be preserved for audit, it shall be presumed that the information contained in the withheld books or records were unfavorable to the Trade Contractor and the Auditor shall note this refusal in the results of the Audit findings for further evaluation by the District and the District's Board. The refusal to release records that are concerning monies associated with the Project may be used as a grounds to debar the Trade Contractor under Article 15 for failure to preserve records under Article 13.11 and the failure to produce required audit records may also be used as a grounds for a negative finding against the Trade Contractor depending on the significance of the records that are withheld by Trade Contractor. Failure to produce job cost data tied to job cost categories and budgets shall be presumed an intentional failure to produce key audit records. Similarly, failure to produce Daily Reports (prepared at or near the time of the Work actually took place (See Article 3.16) shall be presumed an intentional failure to produce key audited records.

If Trade Contractor is seeking costs for inefficiency, home office overhead, or unanticipated increased costs due to delays or acceleration, Trade Contractor shall also produce copies of the original bid tabulation utilized in submitting Trade Contractor's bid for the Project. This document shall be considered confidential and shall not be subject to disclosure through a Public Records Act and shall not be distributed to anyone other than the District and the District's counsel. This bid tabulation shall only be used in litigation, arbitration, evaluation of Claims or Disputes, Audit, and trial. If the records for the bid tabulation are kept on a computer, the Trade Contractor shall also produce all metadata (in native format) that accompanies the bid tabulation for inspection to prove the authenticity of the underlying bid tabulation. Failure to produce the bid tabulation for review of inefficiency, home office overhead, or unanticipated increased costs due to delays or accelerations shall be considered material evidence that the bid tabulation was not favorable to the Trade Contractor. This evidence shall be entered as a jury instruction for trial that the bid tabulation was not produced and the bid tabulation information was unfavorable to the Trade Contractor. The evidence may also be used in debarment proceedings, and noted as an exception to the Audit findings.

Upon notification of Trade Contractor concerning the results of the audit and a reasonable time has passed for Trade Contractor to respond to the Audit findings and if either there is no Dispute of the Audit findings under Article 4.6 or if the result after utilizing the Disputes Clause confirms the Audit findings, the District may seek reimbursement for overstated Claims, Change Orders, or Appeal of Claims and may also undertake debarment proceedings under Article 15 of these General Conditions.

13.12 STORM WATER POLLUTION PREVENTION

13.12.1 Application

This Section addresses the preparation, implementation and monitoring of a Storm Water Pollution Prevention Plan (SWPPP) for the purpose of preventing the discharge of pollutants from the

construction site. This includes the elimination of pollution discharges such as improper dumping, spills or leakage from storage tanks or transfer areas. The District will not issue a Notice to Proceed until Trade Contractor has prepared by a qualified individual and obtained approval of the Permit Registration Documents (“PRDs”) that include a Notice of Intent, Construction Risk Calculation, Site Map, SWPPP, Annual Fee and any additional required documents from all applicable Local Governing Agencies including the Regional Water Quality Control Board. The Trade Contractor shall also secure a certification that the Project has met all of the conditions of the General Construction Activity Storm Water Permit (GCASP) and comply with all applicable local, state and federal regulations governing storm water pollution prevention.

13.12.2 References and Materials

- California Stormwater Quality Association New Development and Redevelopment Best Management Practice Handbook
- 2009 California Stormwater Quality Association Construction BMP Handbook.
- State Water Resources Control Board (2009). Order 2009-0009-DWQ, NPDES General Permit No. CAS000002: Waste Discharge Requirements for Discharges of Storm Water Runoff Associated with Construction and Land Disturbing Activities. Available on-line at:
 - http://www.waterboards.ca.gov/water_issues/programs/stormwater/construction.shtml.

13.12.3 Preparation and Approval

The Trade Contractor shall prepare by a qualified individual the PRDs that include a Notice of Intent, Construction Risk Calculation, Site Map, SWPPP, Annual Fee and any additional required documents. The Trade Contractor’s Qualified SWPPP Developer (“QSD”) shall prepare the Storm Water Pollution Prevention Plan (SWPPP) as required to comply with storm water pollution regulations for project sites with storm water discharges associated with construction activity such as clearing or demolition, grading, excavation and other land disturbances. The SWPPP shall apply to all areas that are directly related to construction activity, including but not limited to staging areas, storage yards, material borrow areas, and access roads.

13.12.3.1 The Trade Contractor shall prepare and submit to the Local Governing Agencies and the District the SWPPP for review and approval if the project sites, new or existing, with land disturbance of 1 or more acres (or less than 1 acres if part of a common plan of development); the construction activity that results in land surface disturbances of less than one acre is part of a larger common plan of development or sale of one or more acres of disturbed land surface; or the construction activity associated with Linear Underground/Overhead Projects (“LUPs”) including, but not limited to, those activities necessary for the installation of underground and overhead linear facilities (e.g., conduits, substructures, pipelines, towers, poles, cables, wires, connectors, switching, regulating and transforming equipment and associated ancillary facilities) and include, but are not limited to, underground utility mark-out, potholing, concrete and asphalt cutting and removal, trenching, excavation, boring and drilling, access road and pole/tower pad and cable/wire pull station, substation construction, substructure installation, construction of tower footings and/or foundations, pole and tower installations, pipeline installations, welding, concrete and/or pavement repair or replacement, and stockpile/borrow locations.

13.12.3.2 The Trade Contractor shall also pay annual renewal fee(s) until the contract is completed and make all such checks payable to the State Water Resources Control Board. The Notice of Intent must be submitted at least two weeks prior to the commencement of construction activities.

13.12.3.3 The Trade Contractor shall prepare the SWPPP by following the format in Sections 2, 3, 4 and Appendices A through F of the California Stormwater BMP Handbook - Construction, January 2009 edition, published by the California Stormwater Quality Association. The publication is available from:

California Stormwater
Quality Association
P.O. Box 2105
Menlo Park, CA 94026-2105
Phone: (650) 366-1042
E-mail: info@casqa.org

or

<https://www.casqa.org/store/products/tabid/154/p-167-construction-handbookportal-initial-subscription.aspx>

13.12.3.4 Where land disturbance is less than 1 acre, any BMPs indicated in the BMP Handbook needed to prevent or minimize storm water pollution shall be implemented at no extra cost to the District.

13.12.3.5 Within two weeks after Award of Contract by the District, the Trade Contractor shall submit to the District's Civil Engineer one copy of the PRDs including the SWPPP for review. After the District's approval, the Trade Contractor shall provide approved copies of the SWPPP as follows: one copy each to the Project Inspector, Construction Manager, Architect, Commissioned Architect and District's Civil Engineer.

13.12.4 Implementation

The Trade Contractor shall implement the Storm Water Pollution Prevention Plan by doing the following:

- a. Obtain a Waste Discharger Identification (WDID) number from the SWRCB before beginning construction. This number will be issued once your PRDs are administratively accepted and fee is received.
- b. Keep the SWPPP, REAPs, monitoring data on the construction site.
- c. Employ a Qualified SWPPP Practitioner (QSP) to implement the SWPPP during construction and develop Rain Event Action Plans ("REAPs").
- d. Install, inspect, maintain and monitor BMPs required by the General Permit.
- e. Install perimeter controls prior to starting other construction work at the site.

- f. Contain on-site storm water at the jobsite. Do not drain on-site water directly into the storm drain.
- g. Implement the SWPPP.
- h. Provide SWPPP and BMP implementation training for those responsible for implementing the SWPPP.
- i. Designate trained personnel for the proper implementation of the SWPPP.
- j. Conduct monitoring, as required, and assess compliance with the Numeric Action Levels (NALs) or Numeric Effluent Limitations (NELs) appropriate to your project.
- k. Report monitoring data:
 - 1. Maintain a paper or electronic copy of all required records for three years from the date generated or date submitted, whichever is last. These records must be available at the construction site until construction is completed.
 - 2. Have a QSD revise the SWPPP as needed to reflect the phases of construction and to suit changing site conditions and instances when properly installed systems are ineffective.
 - 3. Assist the District with entering any necessary data or information into the Stormwater Multi-Application and Reporting System (“SMARTS”) system.
- l. At the end of Construction Contract.
 - 1. Submit Notice of Termination (NOT) into the SMARTS when construction is complete and conditions of termination listed in the NOT have been satisfied. A copy of the NOT can be found at: http://www.waterboards.ca.gov/water_issues/programs/stormwater/construction.shtml.
 - 2. Leave in place storm water pollution prevention controls needed for post-construction storm water management and remove those that are not needed as determined by the District. Thereafter, left-in-place controls will be maintained by the District.
 - 3. Provide Site Monitoring Reports, SWPPP revisions, Compliance Certifications and related documents to the District. Post-construction storm water operation and management plan as mentioned in the compliance certifications are considered to be in place at the end of the Construction Contract.

13.12.5 Monitoring

The Trade Contractor shall conduct examination of storm water pollution prevention controls as required by the State Water Resources Control Board (2009). Order 2009-0009-DWQ, NPDES General Permit No. CAS000002: Waste Discharge Requirements for Discharges of Storm Water Runoff Associated with Construction and Land Disturbing Activities. This includes properly qualified personnel performing all required monitoring, testing, inspections and monitoring. The Trade Contractor shall also conduct examination of storm water pollution prevention controls, as well as before and after each storm event in compliance with the State Water Resources Control Board Order No. 2009-0009-DWQ, National Pollutant Discharge Elimination System General Permit No. CAS000002, Waste Discharge Requirements for Discharges of Storm Water Runoff Associated with Construction and Land Disturbance Activities (General Permit) (SWRCB, 2009).and at least once each 24-hour period during extended storm events to identify BMP effectiveness and implement repairs or BMP changes as soon as feasible. All maintenance related to a storm event should be completed within 48 hours of the storm event. The Contactor shall also prepare and maintain, at the jobsite, a log of each inspection using Site Monitoring Report forms.

13.12.6 Liabilities and Penalties

- a. Review of the SWPPP and inspection logs by the District shall not relieve the Trade Contractor from liabilities arising from non-compliance with storm water pollution regulations.
- b. Payment of penalties for non-compliance by the Trade Contractor shall be the sole responsibility of the Trade Contractor and will not be reimbursed by the District.
- c. Compliance with the Clean Water Act pertaining to construction activity is the sole responsibility of the Trade Contractor. For any fine(s) levied against the District due to non-compliance by the Trade Contractor, the District will deduct from the final payment due the Trade Contractor the total amount of the fine(s) levied on the District, plus legal and associated costs.
- d. The Trade Contractor shall submit to the District a completed NOI for change of information (Construction Site Information and Material Handling/Management Practices).

ARTICLE 14
TERMINATION OR SUSPENSION OF THE CONTRACT

14.1 TERMINATION BY THE DISTRICT FOR CAUSE

14.1.1 Grounds for Termination

The District may terminate the Trade Contractor and/or this Contract for the following reasons:

- a. Persistently or repeatedly refuses or fails to supply enough properly skilled workers or proper materials;
- b. Persistently or repeatedly is absent, without excuse, from the job site;
- c. Fails to make payment to Trade Contractor's Subcontractors, suppliers, materialmen, etc.;
- d. Persistently disregards laws, ordinances, rules, regulations, or orders of a public authority having jurisdiction;
- e. Fails to provide a schedule or fails or refuses to update schedules required under the Contract;
- f. Falls behind on the Project and refuses or fails to undertake a recovery schedule;
- g. If the Trade Contractor has been debarred from performing Work
- h. Becomes bankrupt or insolvent, including the filing of a general assignment for the benefit of creditors; or
- i. Otherwise is in substantial breach of a provision of the Contract Documents.

14.1.2 Notification of Termination

When any of the above reasons exist, the District may, without prejudice to any other rights or remedies of the District and after giving the Trade Contractor and the Trade Contractor's Surety written notice of seven (7) days, terminate the Trade Contractor and/or this Contract and may, subject to any prior rights of the Surety:

- a. Take possession of the Project and of all material, equipment, tools, and construction equipment and machinery thereon owned by the Trade Contractor;
- b. Accept assignment of Subcontracts. Trade Contractor acknowledges and agrees that if the District (in its sole and absolute discretion) decides to takeover completion of the Project, the Trade Contractor agrees to immediately assign all subcontracts to the District which the District has chosen to accept;
- c. Complete the Work by any reasonable method the District may deem expedient, including contracting with a replacement contractor or contractors; and,

- d. Agree to accept a takeover and completion arrangement with Surety that is acceptable to the District Board.

14.1.3 Takeover and Completion of Work after Termination for Cause

A Termination for Cause is an urgent matter which requires immediate radiation since Project Work is open and incomplete, the site is subject to vandalism and theft, the Project site is considered a public nuisance, and there is a possibility of injury and deterioration of the Project Work and materials. Thus, the District shall be entitled to enter a takeover contract to either remediate the unfinished condition or complete the Work for this Project.

14.1.4 Payments Withheld

If the District terminates the Contract for one of the reasons stated in Article 14.1.1, the Trade Contractor shall not be entitled to receive further payment until the Work is complete. All costs associated with the termination and completion of the Project shall be the responsibility of the Trade Contractor and/or its Surety.

14.1.5 Payments upon Completion

If the unpaid balance of the Contract Sum exceeds costs of completing the Work, including compensation for professional services and expenses made necessary thereby, such excess shall be paid to the Trade Contractor. If such costs exceed the unpaid balance, the Trade Contractor and its Surety shall pay the difference to the District. The amount to be paid to the Trade Contractor, or District, as the case may be, shall be certified by the Architect upon application. This payment obligation shall survive completion of the Contract.

14.2 TERMINATION OF CONTRACT BY DISTRICT (TRADE CONTRACTOR NOT AT FAULT)

14.2.1 Termination for Convenience

District may terminate the Contract upon fifteen (15) calendar days of written notice to the Trade Contractor and use any reasonable method the District deems expedient to complete the Project, including contracting with replacement contractor or contractors, if it is found that reasons beyond the control of either the District or Trade Contractor make it impossible or against the District's interest to complete the Project. In such a case, the Trade Contractor shall have no Claims against the District except for: (1) the actual cost for approved labor, materials, and services performed in accordance with the Contract Documents which have not otherwise been previously paid for and which are supported and documented through timesheets, invoices, receipts, or otherwise; and (2) profit and overhead of ten percent (10%) of the approved costs in item (1); and (3) termination cost of five percent (5%) of the approved costs in item (1). Trade Contractor acknowledges and agrees that if the District (in its sole and absolute discretion) decides to takeover completion of the Project, the Trade Contractor agrees to immediately assign all subcontracts to the District which the District has chosen to accept.

14.2.2 Non-Appropriation of Funds/ Insufficient Funds

In the event that sufficient funds are not appropriated to complete the Project or the District determines that sufficient funds are not available to complete the Project, District may terminate or suspend the completion of the Project at any time by giving written notice to the Trade Contractor. In the event that the District exercises this option, the District shall pay for any and all work and materials

completed or delivered onto the site for which value is received, and the value of any and all work then in progress and orders actually placed which cannot be canceled up to the date of notice of termination. The value of work and materials not otherwise already paid for by the District up to the time of termination under this Paragraph shall include a factor of fifteen percent (15%) for the Trade Contractor's overhead and profit and there shall be no other costs or expenses paid to Trade Contractor. All work, materials and orders paid for pursuant to this provision shall become the property of the District. District may, without cause, order Trade Contractor in writing to suspend, delay or interrupt the Project in whole or in part for such period of time as District may determine. Adjustment shall be made for increases in the cost of performance of the Agreement caused by suspense, delay or interruption.

14.3 REMEDIES OTHER THAN TERMINATION

If a default occurs, the District may, without prejudice to any other right or remedy, including, without limitation, its right to terminate the Contract pursuant to Article 14.1, do any of the following:

- a. Permit the Trade Contractor to continue under this Contract, but make good such deficiencies or complete the Contract by whatever method the District may deem expedient, and the cost and expense thereof shall be deducted from the Contract Price or paid by the Trade Contractor to the District on demand;
- b. If the workmanship performed by the Trade Contractor is faulty or defective materials are provided, erected or installed, then the District may order the Trade Contractor to remove the faulty workmanship or defective materials and to replace the same with work or materials that conform to the Contract Documents, in which event the Trade Contractor, at its sole costs and expense, shall proceed in accordance with the District's order and complete the same within the time period given by the District in its notice to the Trade Contractor; or
- c. Initiate procedures to declare the Trade Contractor a non-responsible bidder for a period of two (2) to five (5) years thereafter.

All amounts expended by the District in connection with the exercise of its rights hereunder shall accrue interest from the date expended until paid to the District at the maximum legal rate. The District may retain or withhold any such amounts from the Contract Price. If the Trade Contractor is ordered to replace any faulty workmanship or defective materials pursuant to Paragraph (b) above, the Trade Contractor shall replace the same with new work or materials approved by the Architect and the District, and, at its own cost, shall repair or replace, in a manner and to the extent the Architect and the District shall direct, all Work or material that is damaged, injured or destroyed by the removal of said faulty workmanship or defective material, or by the replacement of the same with acceptable work or materials. In no event shall anything in this Paragraph be deemed to constitute a waiver by the District of any other rights or remedies that it may have at law or in equity, it being acknowledged and agreed by the Trade Contractor that the remedies set forth in this Paragraph are in addition to, and not in lieu of, any other rights or remedies that the District may have at law or in equity.

GENERAL CONDITIONS

ARTICLE 15 DEBARMENT

15.1 DEBARMENT MEANS THERE HAS BEEN A FINDING THAT THE TRADE CONTRACTOR IS NOT RESPONSIBLE.

During the course of the Project, or if it is determined through Change Orders, Claims, or Audit that a Trade Contractor is not responsible, the District may, in addition to other remedies provided in the Contract, debar the Trade Contractor from bidding or proposing on, or being awarded, and/or performing work on District contracts for a specified period of time, which generally will not exceed five (5) years, but may exceed five (5) years or be permanent if the circumstances warrant such debarment. In addition to the debarment proceeding, a finding that a Trade Contractor is to be debarred shall result in the termination of any or all existing Contracts the Trade Contractor may have with the District.

15.2 BOARD FINDING

The District may debar a Trade Contractor if the Board, or the Board's delegatee, in its discretion, finds the Trade Contractor has done any of the following:

15.2.1 Intentionally or with reckless disregard, violated any term of the Contract with the District

15.2.2 Committed an acts or omission which reflects on the Trade Contractor's quality, fitness or capacity to perform Work for the District;

15.2.3 Committed an act or offense which indicates a lack of business integrity or business honesty; or,

15.2.4 Made or submitted a false claim against the District or any other public entity.

15.3 HEARING & PRESENTATION OF EVIDENCE

If there is evidence that the Trade Contractor may be subject to debarment, the District shall notify the Trade Contractor in writing of the evidence which is the basis for the proposed debarment and shall advise the Trade Contractor of the scheduled date for a debarment hearing before the District Board or its designee.

The District Board, or designee, shall conduct a hearing where evidence on the proposed debarment is presented. The Trade Contractor or the Trade Contractor's representative shall be given an opportunity to submit evidence at the hearing. The Trade Contractor shall be provided an adequate amount of time to prepare and object to evidence presented. A tentative proposed decision shall be issued as a tentative decision and the District shall be entitled to modify, deny or adopt the proposed decision. The proposed decision shall contain a recommendation regarding whether the Trade Contractor should be debarred, and, if so, the appropriate length of time of the debarment. The Trade Contractor and the District shall be provided an opportunity to object to the tentative proposed decision for a period of 15 days. If additional evidence is presented, the District shall evaluate this evidence and either issue an amended ruling, issue the same ruling, or call a further hearing.

If a Trade Contractor has been debarred for a period of longer than five (5) years, that Trade Contractor may after the debarment has been in effect for at least five (5) years, submit a written request for review of the debarment determination to reduce the period of debarment or terminate the debarment.

GENERAL CONDITIONS

The District may, in its discretion, reduce the period of debarment or terminate the debarment if it finds that the Trade Contractor has adequately demonstrated one or more of the following: (1) elimination of the grounds for which the debarment was imposed; (2) a bona fide change in ownership or management; (3) material evidence discovered after debarment was imposed; or (4) any other reason that is in the best interests of the District.

The District will consider a request for review of a debarment determination only where: (1) the Trade Contractor has been debarred for a period longer than five (5) years; (2) the debarment has been in effect for at least five (5) years; and (3) the request is in writing, states one or more of the grounds for reduction of the debarment period or termination of the debarment, and includes supporting documentation. Upon receiving an appropriate request, the District will provide notice of the hearing on the request. At the hearing, the District shall review evidence on the proposed reduction of debarment period. This hearing shall be conducted and the request for review decided by the District pursuant to the same procedures as for a debarment hearing.

The District's proposed decision shall contain a recommendation on the request to reduce the period of debarment or terminate the debarment.

The terms shall also apply to Subcontractors of Trade Contractors.

SUPPLEMENTARY GENERAL CONDITIONS

These Supplementary General Conditions amend or supplement the General Conditions and other provisions for the Contract Documents as indicated below. All provisions which are not so amended or supplemented remain in full force and effect.

The General Conditions also may be supplemented elsewhere in the Contract Documents by provisions located in, but not necessarily limited to, Division 1 of the Specifications.

ARTICLE 1. DEFINITIONS

Item 1.1.7 BIM “Building Information Modeling” is not required to be utilized for this project.

Item 1.1.21 Add to the Section: “Whenever the term “Contractor” or “General Contractor” is used anywhere in the Project Manual, Specifications, Drawings or Addenda; it shall be interpreted to mean “Applicable Category Contractor”.

ARTICLE 3.1.2 – BIM CONFLICT RESOLUTION

BIM “Building Information Modeling” is not required to be utilized for this project.

ARTICLE 3.7.2 – SUBMITTALS REQUIRED AT THE COMMENCEMENT OF THE PROJECT

- a. Add the following verbiage: The District may elect to issue a Notice of Intent to Award in order to expedite submittals, shop drawings and samples for material procurement purposes. In the unlikely event that an Award does not take place, Contractor will be compensated for expense of generating submittals.
- b. Revise Submittal (Product Data, Shop Drawings and Samples) due date to 10 Calendar Days unless otherwise noted in the Project Schedule or Work Scope Special Conditions, wherever Submittals Due is noted.

Add Item e. to Article 3.7.2.1: Liquidated damages for untimely submittals: It is critically important to obtain timely and complete submittals from all contractors on this project in order to prevent disruption to the project schedule. If the project is not completed in accordance with the project schedule, it is understood that the District will suffer damage. It is agreed that the Contractor will pay the District **ONE THOUSAND DOLLARS (\$1,000.00)** per calendar day liquidated damages, and not as a penalty, for each calendar day which the CONTRACTOR's submittals are late beyond the terms in Article 3.7.2 of Section 00 08 00 Supplementary General Conditions. In the event a Contractor's failure to provide complete submittals delays or contributes to a delay of an activity on the project schedule critical path, then said liquidated damages shall be increased to the liquidated damage amount specified in document 00 05 00 AGREEMENT.

ARTICLE 3.8 - DOCUMENTS, SAMPLES, AND COMPUTER AT THE SITE

Contractor is not required to provide a computer as noted.

ARTICLE 3.9.5 – SUBMITTAL SUBMISSION PROCEDURE

Please also refer to Specification Section 01 30 00 Submittal Procedures.

ARTICLE 3.10 – SUBSTITUTIONS

REVISE Paragraph 4 to read as follows: The substitution review process is the process whereby a product is determined to be equal to that specified. The materials, products, and equipment described in the Contract Documents establish a standard of required function, dimension, appearance, and quality. Architect may consider requests for substitution of specified equipment, materials, or products only when requests are submitted in accordance with the provisions of the Contract Documents and are received by the Construction Manager within seven (7) calendar prior to opening of bids. Contractor must submit any and all Drawing, Specifications, samples, performance data, calculations, and other information, as may be required to assist the Design Team in determining whether the proposed substitution is acceptable. The burden of establishing these facts shall be upon the bidder. Please also refer to Specification Section 012500 Substitution Procedures.

ARTICLE 3.12 – ALLOWANCES

Please also refer to Specification Section 01 21 00 Allowances.

ARTICLE 3.13 – CLEANING UP

Please also refer to Specification Section 01 74 00 Cleaning.

ARTICLE 7.7.1 COST OF CHANGE ORDERS

Add Item 7.7.1.2: The allowance for the combined overhead and profit included in the total cost to the Owner shall be based on the following schedules:

Schedule 1. Twenty percent (20%) combined overhead and profit of the total estimated costs for the extra work to be performed. All subcontracted work included within the total estimated costs shall not exceed ten percent (10%) combined overhead and profit of the work performed by the subcontractor. This schedule #1 shall apply to all changes totaling less than five hundred dollars (\$500.00).

Schedule #2 Fifteen Percent (15%) combined overhead and profit of the total work included within the total estimated costs shall not exceed ten percent (10%) combined overhead & profit of the work performed by the subcontractor. This schedule #2 shall apply to all changes totaling more than five hundred dollars (\$500.00) but less than seven thousand five hundred dollars (\$7,500.00).

Schedule #3 Ten percent (10%) combined overhead and profit of the total estimated costs of the extra work to be performed. All subcontracted work included within the total estimated costs shall not exceed ten percent (10%) combined overhead and profit of the work performed by the subcontractor. This schedule #3 shall apply to all changes totaling seven thousand five hundred dollars but less than fifteen thousand (\$15,000.00).

Schedule #4 Five percent (5%) combined overhead and profit of the total estimated costs of the extra work to be performed. All subcontracted work included within the total estimated costs shall not exceed ten percent (10%) combined overhead and profit of the work performed by the subcontractor. This schedule #4 shall apply to all changes totaling fifteen thousand dollars (\$15,000.00) or more.

The combined overhead & profit allowances referenced in schedules 1 through 4 are to include the following costs: Home office overhead, offsite supervision, change order preparation, small tools, deliveries, communication, transportation costs, vehicles, final clean-up, negotiation / research, time delays, project interference and disruption, additional guarantee and warranty durations, on site supervision, additional temporary protection, additional construction facilities (as defined in section 01500), additional material handling costs, and additional safety equipment costs.

SUBTOTAL #2: (SUBTOTAL #1 + OH & P from above schedule) \$ _____

PRIME CONTRACTOR'S BOND: (@ actual original rate not to exceed 2%) \$ _____

TOTAL CHANGE ORDER REQUEST (SUBTOTAL #2 + BOND) \$ _____

The amount of credit to be allowed by the CONTRACTOR to the DISTRICT for a deletion or change which results in a net decrease in the Contract Sum shall be the actual net cost. When both additions and credits covering related work or substitutions are involved in a change, the allowance for overhead and profit shall be figured on the basis of net increase, if any, with respect to that change.

Article 8.2.2 PERFORMANCE DURING WORKING HOURS:

Add Item 8.2.2.1: Where a single shift is worked, eight (8) consecutive hours between **7:00 AM** and **4:00 PM** shall constitute a work day at the applicable prevailing wage rate(s).

Add Item 8.2.2.2: Forty (40) hours between **Monday, 7:00 AM** and **Saturday, 4:00 PM** shall constitute a work week at the applicable prevailing wage rate(s);

ARTICLE 8.3.2.2 – TRADE CONTRACTOR BASELINE SCHEDULE

Items “c” and “d” are not applicable as BIM “Building Information Modeling” is not required to be utilized for this project.

ARTICLE 8.4.1 LIQUIDATED DAMAGES

Add Item 8.4.1.1: Trade Contractor will be liable to District for Liquidated Damages pursuant to Article 8.4 for each calendar day of delay in the amount of **\$1,500/per day**.

ARTICLE 9.2.2.5 COST BREAKDOWN

Revise Article 9.2.2.5 to read: *Labor and Materials shall be combined*. Labor and Materials shall be combined into on line item unless specifically agreed in writing by the District.

ARTICLE 9.3.1 PROGRESS PAYMENTS

Add Item g. In addition to the provisions for partial payment made in the preceding paragraphs of this Article, the District may make partial payments for mobilization costs, as defined by Public Contract Code, Section 10104, not to exceed the following:

1. When 5% of the original contact amounts is earned, 50% of the amount bid for mobilization, or 5% of the original contract amount, whichever is lesser, may be paid.
2. When 10% if the original contact amount is earned, 75% of the amount bid for mobilization, or 7.5% of the original contact amount, whichever is lesser, may be paid.
3. When 20% of the original contact amount is earned, 95% of the amount bid for mobilization, or 9.5% of the original contact amount, whichever is lesser, may be paid.
4. When 50% of the original contract amount is earned, 100% of the amount bid for mobilization, or 10% of the original contract amount, whichever is lesser, may be paid.

Add Item h. Closeout documentation shall have a value in the schedule of values of not less than 5%.

ARTICLE 9.4 APPLICATIONS FOR PROGRESS PAYMENTS

Please also refer to Specification Section 01 01 90 Contract Considerations.

ARTICLE 9.6.1 DECISIONS TO WITHHOLD PAYMENT

Add Item x: Failure of the Contractor and/or Contractor's subcontractor(s) to submit properly completed certified payroll records and documentation acceptable to the District for any period prior to the close of the payment application period.

Add Item y: Failure of the Contractor and/or Contractor's subcontractor(s) to comply with any provision of the District's labor compliance program.

Add Item z: Failure of the Contractor to provide the District sufficient time to review and/or audit any certified payroll reports to determine their acceptability. Any delay by Contractor and/or Subcontractor(s) in providing certified payroll reports to the District in a timely manner will delay the District's review and/or audit of the certified records and consequently the Contractor's payment.

ARTICLE 9.11 COMPLETION AND FINAL PAYMENT

Reference Section 9.11.3 Retainage (100% Billing for the Entire Project); Item a, Procedures for Applications for Retention. Revise to read as follows: Submittal of the following are express conditions precedent to the District's obligation to disburse the Final Payment

Add item ix. to read as follows: duly completed and executed forms of Conditional or Unconditional Waivers and Releases of rights upon Final Payment of the Contractor, Subcontractors of any tier and Material Suppliers in accordance with California Civil Code §§8136 or 8138, with each of the same stating that there are, or will be, no claims for additional compensation after disbursement of the Final Payment.

ARTICLE 11.10 PERFORMANCE AND PAYMENT BONDS

Add Item 11.10.4: The number of executed copies of the Performance Bond and the Payment Bond required is three (3).

ARTICLE 13.8 RECORDS OF WAGES PAID

Add Section 13.8.3 Compliance Monitoring Unit

- a) This Project is subject to labor compliance monitoring and enforcement by the Compliance Monitoring Unit ("CMU") within the Division of Labor Standards Enforcement pursuant to Title 8, California Code of Regulations, Section 16450 et seq.
- b) The Contractor and all Subcontractors shall be required to furnish, at least monthly, electronic certified payroll records directly to the Labor Commissioner/ Compliance Monitoring Unit in accordance with Title 8, California Code of Regulations, Section 16450 et seq. All payroll records shall be furnished in a format prescribed by Title 8, California Code of Regulations, Section 16401. The Contractor and all Subcontractors are directed to go to <https://app.mylcm.com> and follow the instructions to enroll in CMU's eCPR system to submit electronic certified payroll records. The District will have direct and immediate access to all CPRs for the Project that are submitted through the eCPR system. The District can use this information for any appropriate purpose, including monitoring compliance, identifying suspected violations, and responding to Public Records Act requests.
- c) The CMU may conduct various compliance monitoring and enforcement activities including, but not limited to, confirming the accuracy of payroll records, conducting worker interviews, conducting audits, requiring submission of itemized statements prepared in accordance with

Labor Code section 226 and conducting random in-person inspections of the Project site (“On-Site Visits”). On-Site Visits may include inspections of records, inspections of the work site and observation of work activities, interviews of workers and others involved with the Project, and any other activities deemed necessary by the CMU to ensure compliance with prevailing wage requirements. The CMU shall have free access to any construction site or other place of labor and may obtain any information or statistics pertaining to the lawful duties of the Labor Commissioner.

- d) Any lawful activities conducted or any requests made by the CMU shall not be the basis for any delays, claims, costs, damages or liability of any kind against the District by the Contractor. Contractor and all Subcontractors shall cooperate and comply with any lawful requests by the Compliance Monitoring Unit. The failure of the CMU, the Division of Labor Standards Enforcement, or any other part of the Department of Industrial Relations to comply with any requirement imposed by the California Code of Regulations, Title 8, Chapter 8 shall not of itself constitute a defense to the failure to pay prevailing wages or to comply with any other obligation imposed by Division 2, Part 7, Chapter 1 of the Labor Code.
- e) Prior to commencing any work on the Project, the Contractor shall post the notice/poster required under Title 8, California Code of Regulations, Section 16451(d) in both English and Spanish at a conspicuous, weatherproof area at the Project site. The required notice/poster is available on the CMU website, at the Division of Labor Standards Enforcement District Offices or can be obtained by emailing a request to CMU@dir.ca.gov.

CORONAVIRUS/ COVID-19

- a) Due to the current Coronavirus/ COVID-19 pandemic, the District is requiring all Trade Contractors, Subcontractors and any workers performing work on this Project fully comply with any existing and future order, regulations or other requirements issued by any federal, state or local authority applicable to the Project. At this time, all workers shall comply with current recommendations and requirements related to COVID-19 including, but not limited to, staggered start times and to avoid congested areas; a minimum of six feet of separation and social distancing; requirement that any worker that feels ill or has COVID-19 symptoms immediately leave the project site, report such symptoms to his or her designated COVID-19 Representative (discussed in further detail below), and not return until all symptoms are clear for a minimum of 14 days; cleaning work areas; washing hands and using hand sanitizers often; wearing proper personal protection equipment (PPE) at all times; and limiting contacts to the extent possible with others on the Project. All workers must fully comply with any current and future orders and recommendations issued by San Bernardino County including, but not limited to, the San Bernardino County Operational Area Emergency Operations Center, the San Bernardino County Health Care Agency/ County Health Officer, as well as other applicable guidelines and recommendations issued by OSHA and CDC. If there are any inconsistencies or conflicts with any guidelines or recommendations, the stricter and more stringent provisions shall apply and prevail. Attached are additional requirements and recommendations.
- b) All Trade Contractors and all Subcontractors shall appoint and identify in writing a COVID-19 Representative along with contact information including email and cell phone. All notices sent to the designated COVID-19 Representative shall be deemed to have been sent to all of the COVID-19 Representative’s company and all employees.
- c) All Trade Contractors must prepare and submit its current Injury and Illness Prevention Plan(IIPP) to the District. The IIPP must include specific provisions to address what measures the Trade Contractor will implement to prevent or reduce COVID-19 and other infection hazards and must include provisions for training employees on its COVID-19 infection prevention methods. Such provisions shall be consistent with all requirements and recommendations from Cal/OSHA and the CDC.

- d) If any Trade Contractor or any Subcontractor experiences any delay due to complying with any current or future order issued by federal, state or local authority related to COVID-19, the Trade-Contractor shall notify the District in writing and follow all other requirements in the contract documents related to delays. If any delays are approved by the District, the Trade Contractor agrees that such delays shall be deemed excusable non-compensable delays.

FEDERAL WAGE DETERMINATION

- a) The applicable Federal Wage Determination Rates are referenced in Supplemental General Conditions 00 08 00-1.

END OF SECTION

SUPPLEMENTARY GENERAL CONDITIONS

These Supplementary General Conditions amend or supplement the General Conditions and other provisions for the Contract Documents as indicated below. All provisions which are not so amended or supplemented remain in full force and effect.

The General Conditions also may be supplemented elsewhere in the Contract Documents by provisions located in, but not necessarily limited to, Division 1 of the Specifications.

ARTICLE 1. DEFINITIONS

Item 1.1.7 BIM “Building Information Modeling” is not required to be utilized for this project.

Item 1.1.21 Add to the Section: “Whenever the term “Contractor” or “General Contractor” is used anywhere in the Project Manual, Specifications, Drawings or Addenda; it shall be interpreted to mean “Applicable Category Contractor”.

ARTICLE 3.1.2 – BIM CONFLICT RESOLUTION

BIM “Building Information Modeling” is not required to be utilized for this project.

ARTICLE 3.7.2 – SUBMITTALS REQUIRED AT THE COMMENCEMENT OF THE PROJECT

- a. Add the following verbiage: The District may elect to issue a Notice of Intent to Award in order to expedite submittals, shop drawings and samples for material procurement purposes. In the unlikely event that an Award does not take place, Contractor will be compensated for expense of generating submittals.
- b. Revise Submittal (Product Data, Shop Drawings and Samples) due date to 10 Calendar Days unless otherwise noted in the Project Schedule or Work Scope Special Conditions, wherever Submittals Due is noted.

Add Item e. to Article 3.7.2.1: Liquidated damages for untimely submittals: It is critically important to obtain timely and complete submittals from all contractors on this project in order to prevent disruption to the project schedule. If the project is not completed in accordance with the project schedule, it is understood that the District will suffer damage. It is agreed that the Contractor will pay the District **ONE THOUSAND DOLLARS (\$1,000.00)** per calendar day liquidated damages, and not as a penalty, for each calendar day which the CONTRACTOR's submittals are late beyond the terms in Article 3.7.2 of Section 00 08 00 Supplementary General Conditions. In the event a Contractor's failure to provide complete submittals delays or contributes to a delay of an activity on the project schedule critical path, then said liquidated damages shall be increased to the liquidated damage amount specified in document 00 05 00 AGREEMENT.

ARTICLE 3.8 - DOCUMENTS, SAMPLES, AND COMPUTER AT THE SITE

Contractor is not required to provide a computer as noted.

ARTICLE 3.9.5 – SUBMITTAL SUBMISSION PROCEDURE

Please also refer to Specification Section 01 30 00 Submittal Procedures.

ARTICLE 3.10 – SUBSTITUTIONS

REVISE Paragraph 4 to read as follows: The substitution review process is the process whereby a product is determined to be equal to that specified. The materials, products, and equipment described in the Contract Documents establish a standard of required function, dimension, appearance, and quality. Architect may consider requests for substitution of specified equipment, materials, or products only when requests are submitted in accordance with the provisions of the Contract Documents and are received by the Construction Manager within seven (7) calendar prior to opening of bids. Contractor must submit any and all Drawing, Specifications, samples, performance data, calculations, and other information, as may be required to assist the Design Team in determining whether the proposed substitution is acceptable. The burden of establishing these facts shall be upon the bidder. Please also refer to Specification Section 012500 Substitution Procedures.

ARTICLE 3.12 – ALLOWANCES

Please also refer to Specification Section 01 21 00 Allowances.

ARTICLE 3.13 – CLEANING UP

Please also refer to Specification Section 01 74 00 Cleaning.

ARTICLE 7.7.1 COST OF CHANGE ORDERS

Add Item 7.7.1.2: The allowance for the combined overhead and profit included in the total cost to the Owner shall be based on the following schedules:

Schedule 1. Twenty percent (20%) combined overhead and profit of the total estimated costs for the extra work to be performed. All subcontracted work included within the total estimated costs shall not exceed ten percent (10%) combined overhead and profit of the work performed by the subcontractor. This schedule #1 shall apply to all changes totaling less than five hundred dollars (\$500.00).

Schedule #2 Fifteen Percent (15%) combined overhead and profit of the total work included within the total estimated costs shall not exceed ten percent (10%) combined overhead & profit of the work performed by the subcontractor. This schedule #2 shall apply to all changes totaling more than five hundred dollars (\$500.00) but less than seven thousand five hundred dollars (\$7,500.00).

Schedule #3 Ten percent (10%) combined overhead and profit of the total estimated costs of the extra work to be performed. All subcontracted work included within the total estimated costs shall not exceed ten percent (10%) combined overhead and profit of the work performed by the subcontractor. This schedule #3 shall apply to all changes totaling seven thousand five hundred dollars but less than fifteen thousand (\$15,000.00).

Schedule #4 Five percent (5%) combined overhead and profit of the total estimated costs of the extra work to be performed. All subcontracted work included within the total estimated costs shall not exceed ten percent (10%) combined overhead and profit of the work performed by the subcontractor. This schedule #4 shall apply to all changes totaling fifteen thousand dollars (\$15,000.00) or more.

The combined overhead & profit allowances referenced in schedules 1 through 4 are to include the following costs: Home office overhead, offsite supervision, change order preparation, small tools, deliveries, communication, transportation costs, vehicles, final clean-up, negotiation / research, time delays, project interference and disruption, additional guarantee and warranty durations, on site supervision, additional temporary protection, additional construction facilities (as defined in section 01500), additional material handling costs, and additional safety equipment costs.

SUBTOTAL #2: (SUBTOTAL #1 + OH & P from above schedule) \$ _____

PRIME CONTRACTOR'S BOND: (@ actual original rate not to exceed 2%) \$ _____

TOTAL CHANGE ORDER REQUEST (SUBTOTAL #2 + BOND) \$_____

The amount of credit to be allowed by the CONTRACTOR to the DISTRICT for a deletion or change which results in a net decrease in the Contract Sum shall be the actual net cost. When both additions and credits covering related work or substitutions are involved in a change, the allowance for overhead and profit shall be figured on the basis of net increase, if any, with respect to that change.

Article 8.2.2 PERFORMANCE DURING WORKING HOURS:

Add Item 8.2.2.1: Where a single shift is worked, eight (8) consecutive hours between **6:00 AM** and **3:00 PM** shall constitute a work day at the applicable prevailing wage rate(s).

Add Item 8.2.2.2: Forty (40) hours between **Monday, 6:00 AM** and **Friday, 3:00 PM** shall constitute a work week at the applicable prevailing wage rate(s);

ARTICLE 8.3.2.2 – TRADE CONTRACTOR BASELINE SCHEDULE

Items “c” and “d” are not applicable as BIM “Building Information Modeling” is not required to be utilized for this project.

ARTICLE 8.4.1 LIQUIDATED DAMAGES

Add Item 8.4.1.1: Trade Contractor will be liable to District for Liquidated Damages pursuant to Article 8.4 for each calendar day of delay in the amount of **\$1,500/per day**.

ARTICLE 9.2.2.5 COST BREAKDOWN

Revise Article 9.2.2.5 to read: *Labor and Materials shall be combined.* Labor and Materials shall be combined into on line item unless specifically agreed in writing by the District.

ARTICLE 9.3.1 PROGRESS PAYMENTS

Add Item g. In addition to the provisions for partial payment made in the preceding paragraphs of this Article, the District may make partial payments for mobilization costs, as defined by Public Contract Code, Section 10104, not to exceed the following:

1. When 5% of the original contract amount is earned, 50% of the amount bid for mobilization, or 5% of the original contract amount, whichever is lesser, may be paid.
2. When 10% of the original contract amount is earned, 75% of the amount bid for mobilization, or 7.5% of the original contract amount, whichever is lesser, may be paid.
3. When 20% of the original contract amount is earned, 95% of the amount bid for mobilization, or 9.5% of the original contract amount, whichever is lesser, may be paid.
4. When 50% of the original contract amount is earned, 100% of the amount bid for mobilization, or 10% of the original contract amount, whichever is lesser, may be paid.

Add Item h. Closeout documentation shall have a value in the schedule of values of not less than 5%.

ARTICLE 9.4 APPLICATIONS FOR PROGRESS PAYMENTS

Please also refer to Specification Section 01 01 90 Contract Considerations.

ARTICLE 9.6.1 DECISIONS TO WITHOLD PAYMENT

Add Item x: Failure of the Contractor and/or Contractor's subcontractor(s) to submit properly completed certified payroll records and documentation acceptable to the District for any period prior to the close of the payment application period.

Add Item y: Failure of the Contractor and/or Contractor's subcontractor(s) to comply with any provision of the District's labor compliance program.

Add Item z: Failure of the Contractor to provide the District sufficient time to review and/or audit any certified payroll reports to determine their acceptability. Any delay by Contractor and/or Subcontractor(s) in providing certified payroll reports to the District in a timely manner will delay the District's review and/or audit of the certified records and consequently the Contractor's payment.

ARTICLE 9.11 COMPLETION AND FINAL PAYMENT

Reference Section 9.11.3 Retainage (100% Billing for the Entire Project); Item a, Procedures for Applications for Retention. Revise to read as follows: Submittal of the following are express conditions precedent to the District's obligation to disburse the Final Payment

Add item ix. to read as follows: duly completed and executed forms of Conditional or Unconditional Waivers and Releases of rights upon Final Payment of the Contractor, Subcontractors of any tier and Material Suppliers in accordance with California Civil Code §§8136 or 8138, with each of the same stating that there are, or will be, no claims for additional compensation after disbursement of the Final Payment.

ARTICLE 11.10 PERFORMANCE AND PAYMENT BONDS

Add Item 11.10.4: The number of executed copies of the Performance Bond and the Payment Bond required is four (4).

ARTICLE 13.8 RECORDS OF WAGES PAID

Add Section 13.8.3 Compliance Monitoring Unit

- a) This Project is subject to labor compliance monitoring and enforcement by the Compliance Monitoring Unit ("CMU") within the Division of Labor Standards Enforcement pursuant to Title 8, California Code of Regulations, Section 16450 et seq.
- b) The Contractor and all Subcontractors shall be required to furnish, at least monthly, electronic certified payroll records directly to the Labor Commissioner/ Compliance Monitoring Unit in accordance with Title 8, California Code of Regulations, Section 16450 et seq. All payroll records shall be furnished in a format prescribed by Title 8, California Code of Regulations, Section 16401. The Contractor and all Subcontractors are directed to go to <https://app.mylcm.com> and follow the instructions to enroll in CMU's eCPR system to submit electronic certified payroll records. The District will have direct and immediate access to all CPRs for the Project that are submitted through the eCPR system. The District can use this information for any appropriate purpose, including monitoring compliance, identifying suspected violations, and responding to Public Records Act requests.
- c) The CMU may conduct various compliance monitoring and enforcement activities including, but not limited to, confirming the accuracy of payroll records, conducting worker interviews, conducting audits, requiring submission of itemized statements prepared in accordance with Labor Code section 226 and conducting random in-person inspections of the Project site ("On-Site Visits"). On-Site Visits may include inspections of records, inspections of the work site and observation of work activities, interviews of workers and others involved with the Project, and any other activities deemed necessary by the CMU to ensure compliance with prevailing wage requirements. The CMU shall have free access to any construction site or other place of labor and

may obtain any information or statistics pertaining to the lawful duties of the Labor Commissioner.

- d) Any lawful activities conducted or any requests made by the CMU shall not be the basis for any delays, claims, costs, damages or liability of any kind against the District by the Contractor. Contractor and all Subcontractors shall cooperate and comply with any lawful requests by the Compliance Monitoring Unit. The failure of the CMU, the Division of Labor Standards Enforcement, or any other part of the Department of Industrial Relations to comply with any requirement imposed by the California Code of Regulations, Title 8, Chapter 8 shall not of itself constitute a defense to the failure to pay prevailing wages or to comply with any other obligation imposed by Division 2, Part 7, Chapter 1 of the Labor Code.
- e) Prior to commencing any work on the Project, the Contractor shall post the notice/poster required under Title 8, California Code of Regulations, Section 16451(d) in both English and Spanish at a conspicuous, weatherproof area at the Project site. The required notice/poster is available on the CMU website, at the Division of Labor Standards Enforcement District Offices or can be obtained by emailing a request to CMU@dir.ca.gov.

CORONAVIRUS/ COVID-19

- a) Due to the current Coronavirus/ COVID-19 pandemic, the District is requiring all Trade Contractors, Subcontractors and any workers performing work on this Project fully comply with any existing and future order, regulations or other requirements issued by any federal, state or local authority applicable to the Project. At this time, all workers shall comply with current recommendations and requirements related to COVID-19 including, but not limited to, staggered start times and to avoid congested areas; a minimum of six feet of separation and social distancing; requirement that any worker that feels ill or has COVID-19 symptoms immediately leave the project site, report such symptoms to his or her designated COVID-19 Representative (discussed in further detail below), and not return until all symptoms are clear for a minimum of 14 days; cleaning work areas; washing hands and using hand sanitizers often; wearing proper personal protection equipment (PPE) at all times; and limiting contacts to the extent possible with others on the Project. All workers must fully comply with any current and future orders and recommendations issued by San Bernardino County including, but not limited to, the San Bernardino County Operational Area Emergency Operations Center, the San Bernardino County Health Care Agency/ County Health Officer, as well as other applicable guidelines and recommendations issued by OSHA and CDC. If there are any inconsistencies or conflicts with any guidelines or recommendations, the stricter and more stringent provisions shall apply and prevail. Attached are additional requirements and recommendations.
- b) All Trade Contractors and all Subcontractors shall appoint and identify in writing a COVID-19 Representative along with contact information including email and cell phone. All notices sent to the designated COVID-19 Representative shall be deemed to have been sent to all of the COVID-19 Representative's company and all employees.
- c) All Trade Contractors must prepare and submit its current Injury and Illness Prevention Plan(IIPP) to the District. The IIPP must include specific provisions to address what measures the Trade Contractor will implement to prevent or reduce COVID-19 and other infection hazards and must include provisions for training employees on its COVID-19 infection prevention methods. Such provisions shall be consistent with all requirements and recommendations from Cal/OSHA and the CDC.
- d) If any Trade Contractor or any Subcontractor experiences any delay due to complying with any current or future order issued by federal, state or local authority related to COVID-19, the Trade Contractor shall notify the District in writing and follow all other requirements in the contract

documents related to delays. If any delays are approved by the District, the Trade Contractor agrees that such delays shall be deemed excusable non-compensable delays.

FEDERAL WAGE DETERMINATION

- a) The applicable Federal Wage Determination Rates are referenced in Supplemental General Conditions 00 08 00-1.

END OF SECTION

SECTION 01 01 00

SUMMARY OF WORK

1. PART 1 GENERAL

A. SECTION INCLUDES

B.

1. Work included.
2. Contractor use of site.
3. Work Sequence

B. WORK INCLUDED

1. Work of this contract consists of: Abatement and demolition of existing flooring, interior wall preparation of existing interior walls followed by new flooring with base and new interior paint.
2. Construct the work of each contract under a single lump sum contract. Multiple contracts will be awarded by the District as outlined in the Notice Inviting Bids (Section 00 00 20) and in accordance with the Construction Manager's "Work Scope Special Conditions" (Section 01 01 10) for each work scope category. Each Category Contract will include ALL work in all of the specification sections noted under said Category in the Notice Inviting Bids. Division "0" and "1" of the Project Manual will be a part of ALL bids and contracts in ALL Categories.
 - a. "Work Scope Special Conditions" (Section 01 01 10) is a matrix which contains the special conditions of each Category Contract. Columns containing a "yes" indicate that the work under the "Description" is to be a part of the Category Contract noted at the top of the list. Columns containing a "no" indicate that the work under the "Description" is to be excluded by the Category Contractor noted at the top of the list.
 - b. The work included in each specification section includes, but is not limited to, the furnishing of all labor, materials, appliances, tools, equipment, facilities, transportation, applicable taxes and services necessary for, and incidental to, performing all operations in connection with the specification section complete as shown on the drawings and / or specified therein.
 - c. ALL of the work in each specification section MUST be included in the work scope "Category" for which it has been assigned unless it has been SPECIFICALLY noted within the "Work Scope Special Conditions" (Section 01 01 10) to be excluded. CONTRACTOR MUST EXAMINE ALL

SPECIFICATION SECTIONS AND DRAWINGS for related work that may be specified or shown on the drawings and required to be included under their specific Category or referenced specification section.

- d. In the unlikely event that the same work called out in this Contractor's category is also called out in the category of another contractor or contractors, BOTH this Contractor and the other contractor/s will be expected to have included the work in their bids. It is not the District's intention for this double coverage to happen, however if it does, the District will seek a credit quotation from all affected contractors and the contractor offering the smallest credit or least favorable terms to the District shall be the contractor directed to perform the work. The other affected contractor/s shall have their contract work scope/s and price/s reduced by their proposed credit amounts.

C. WORK BY OWNER

1. Items noted "NIC" (Not In Contract) will be furnished and installed by the Owner.

D. OWNER FURNISHED PRODUCTS

1. Items noted "OFCI" (Owner Furnished - Contractor Installed) will be furnished by the Owner and installed by the Contractor.
2. Items noted "OFOI" (Owner Furnished - Owner Installed) will be furnished by the Owner and installed by the Owner.
3. Owner's responsibilities
 - a. Arrange for and deliver Owner reviewed shop drawings, product data and samples to the Contractor.
 - b. Arrange and pay for product delivery to site.
 - c. On delivery, inspect products jointly with Contractor.
 - d. Submit claims for transportation damage and replace damaged, defective or deficient items.
 - e. Arrange for manufacturer's warranties, inspections, and service.
4. Contractor's responsibilities
 - a. Review Owner reviewed shop drawings, product data, and samples.
 - b. Receive and unload products at site; inspect for completeness or damage jointly with Owner.
 - c. Handle, store, install, assemble, and finish products.
 - d. Repair or replace items damaged after receipt.
5. Products
 - a. See equipment schedules.
6. Items furnished by Owner for installation by Contractor (OFCD):
 - a. See equipment schedules.

E. CONTRACTOR USE OF THE SITE

1. Contractor shall have use of the site throughout the construction period as regulated by the Construction Manager.
2. Construction operations: Limited to area indicated on drawings.

F. WORK SEQUENCE

1. Construct work in accordance with the Project Construction Schedule,

Section 01 31 00.

2. PART 2 PRODUCTS
Not Used

3. PART 3 EXECUTION
Not Used

END OF SECTION

CONTRACT CONSIDERATIONS

1. PART 1 GENERAL

A. SECTION INCLUDES

1. Application for payment
2. Defect assessment
3. Non-payment for rejected work
4. Change procedures
5. Alternates

B. APPLICATION FOR PAYMENT

1. The only acceptable progress and/or final billing to the District is the Billing Payment Request generated by the Construction Manager each month on behalf of the Prime Contractors.
2. Between the 15th & 20th of each month, the Construction Manager will e-mail a request for proposed billing percentages for each applicable budget line item for their contract to the Prime Contractors who have performed work for the current month.
3. Stored Materials: The District is not required to pay for any materials in advance, as per Article 9.3.2 of the General Conditions but if acceptable due to pre-approved project conditions, the following items, at a minimum must be met:
 - i. Provide detailed invoices of materials.
 - ii. Provide insurance certificate, if stored offsite, and proof of bonded warehouse.
 - iii. Provide photographs of materials labeled for the project.
 - iv. Inspector to provide verification of the stored materials at the facility.
4. Prime Contractors who have not been contacted by the 24th of the month must contact the Construction Manager to discuss their proposed billing percentages for the current month.
5. The Construction Manager's Team will review & approve the requested percentages in draft form. Upon their review, the Construction Manager's Superintendent shall then review the requested percentages in draft form with the Inspector for review & approval.
6. If any changes are made to these requested percentages by the Construction Manager's Team and/or Inspector, the Prime Contractors affected will be contacted and advised of their new percentages.
7. Once approved by the Construction Manager's Team and Inspector, between the 25th and 26th of the month, individual billings will be generated by the Construction Manager's home office and emailed to the appropriate Prime Contractors.
8. Prime Contractors will electronically sign in blue ink and return via email or if required, forward 4 "wet" signed in blue ink copies of billing and either hand carry or overnight to the Construction Manager's home office for further processing by the Architect, Inspector, Construction Manager, and Owner. Notarized copies will be required if indicated.

C. DEFECT ASSESSMENT

1. Replace the work, or portions of the work, not conforming to specified requirements
2. If, in the opinion of the Architect, it is not practical to remove and replace the work, the Architect will direct one of the following remedies:
 - a. The defective work may remain, but the listed schedule of value will be adjusted to a new value at the discretion of the Architect.
 - b. The defective work will be partially repaired to the instructions and satisfaction of the Architect, and the listed schedule of value will be adjusted to reflect a new value at the discretion of the Architect.

D. NON-PAYMENT FOR REJECTED WORK

1. Payment will not be made for any of the following:
 - a. Products wasted or disposed of in a manner that is not acceptable
 - b. Products determined to be unacceptable before or after placement
 - c. Products not completely unloaded from the transporting vehicle
 - d. Products placed beyond the lines and levels for the required work
 - e. Products remaining on hand after completion of the work
 - f. Loading, hauling, and disposing of rejected products

E. CHANGE PROCEDURES

1. The Architect will advise of minor changes in the work not involving an adjustment to contract sum/price or contract time as authorized by the General Conditions on AIA Form G710 Architect's Supplemental Instructions.
2. The Architect may issue a Proposal Request which includes a detailed description of a proposed change with supplementary or revised drawings and specifications. The contractor will prepare and submit a detailed estimate within 14 days.
3. The Contractor may propose a change by submitting a Change Order Request to the Architect describing the proposed change and its full effect on the work. Include a statement describing the reason for the change and the effect on the contract sum and contract time with full documentation and a statement describing the effect on work by separate or other contractors.
4. Stipulated sum change order: Based on Proposal Request and Contractor's fixed price quotation or Contractor's Change Order Request as approved by the Architect.
5. Time and Material / Force Account Change Order: Submit itemized account and supporting data after change completion within time limits indicated in the General Conditions of the contract.
6. Maintain detailed records of work done on Time and Material / Force Account basis. Provide full information required for evaluation required for evaluation of proposed changes, and to substantiate costs for changes in the work as indicated in the General Conditions of the contract.
7. Construction Change Work Directive: The architect may issue a directive signed by the Owner and Architect, instructing the Contractor to proceed with a change in the work for subsequent inclusion in a Change Order. Document will describe changes in the work and designate the method of determining any change in contract sum or contract time. Promptly execute the change.
8. Change order forms: AIA G701 Change Order.

9. Execution of change orders: The architect will issue change orders for the parties' signatures as provided in the conditions of the contract.
10. All addenda (changes and/or revision prior to award of contract) and change orders (changes and revisions after award of the contract) shall be approved by the Architect and the Division of the State Architect (DSA) prior to the start of construction covered by those changes and/or revisions.
11. Promptly revise the Schedule of Values and Application for Payment forms to record each authorized Change Order as a separate line item and adjust the contract sum.
12. Promptly revise progress schedules to reflect any changes in contract time, revise sub-schedules to adjust times for other items of work affected by the change and resubmit.
13. Promptly enter changes in project record documents

F. ALTERNATES

1. Alternates quoted on the Bid Form will be reviewed, accepted, or rejected at the Owner's option. Accepted alternates will be identified in the Owner-Contractor Agreement, or by change order at a later date.
2. Coordinate related work and modify surrounding work as required to integrate the work of each alternate.
3. Schedule of Alternates:

N/A

2. PART 2 PRODUCTS
Not Used
3. PART 3 EXECUTION
Not Used

END OF SECTION

COORDINATION AND MEETINGS

1. PART 1 GENERAL

A. SECTION INCLUDES

1. Coordination
2. Field engineering
3. Mandatory Pre-construction conference
4. Progress meetings
5. Pre-installation conferences

B. COORDINATION

1. Coordinate scheduling, submittals, and work of the various sections of the specifications to assure efficient and orderly sequence of installation of interdependent construction elements, with provisions for accommodating items installed later.
2. Prior to commencement of a particular type or kind of work, examine relevant information, contract documents, and subsequent data issued to the project.
3. Verify that utility requirement characteristics of operating equipment are compatible with building utilities. Coordinate work of various sections having interdependent responsibilities for installing, connecting to, and placing in service, such equipment.
4. Coordinate space requirements and installation of mechanical and electrical work which are indicated diagrammatically on drawings. Follow routing shown for pipes, ducts, and conduit, as closely as practicable; place runs parallel with line of building. Utilize spaces efficiently to maximize accessibility for other installations, for maintenance, and for repairs.
5. In finished areas, except as otherwise indicated, conceal pipes, ducts, and wiring within the construction. Coordinate locations of fixtures and outlets with finish elements.
6. In locations where several elements of mechanical and electrical work must be sequenced and positioned with precision in order to fit into available space, prepare coordination drawings showing the actual conditions required for the installation. Prepare coordination drawings prior to purchasing, fabricating, or installing any of the elements required to be coordinated.
7. Closing up of walls, partitions or furred spaces, backfilling and other covering up operations shall not proceed until all enclosed or covered work and inspections have been completed. Verify before proceeding.
8. Coordinate completion and clean up of work of separate sections in preparation for substantial completion (and for portions of work designated for Owner's full and / or partial occupancy).
9. After Owner occupancy of premises, coordinate access to site for correction of defective work and work not in accordance with contract documents, to minimize disruption of Owner's activities.
10. Coordinate all utility company work in accordance with the General Conditions.

C. **FIELD ENGINEERING**

1. Each Prime Contractor requiring same shall employ a Land Surveyor, registered in the State of California, and acceptable to the Architect.
2. Control datum for survey is that established by Owner provided survey. Contractor to locate and protect survey control and reference points.
3. Provide field engineering services. Establish elevations, lines, and levels, utilizing recognized engineering survey practices.

D. **MANDATORY PRE-CONSTRUCTION CONFERENCE**

1. Construction Manager will schedule a conference immediately after receipt of fully executed contract documents prior to project mobilization.
2. Mandatory Attendance: Construction Manager, Owner, Owner's Resident Inspector, Owner's Testing Laboratory Representative, Owner's Labor Compliance Program Representative, Architect, Prime Contractor/s, Prime Contractor's Job Superintendent, and all listed Subcontractors.
3. Optional Attendance: Architect's consultants, and utility company representatives.
4. Construction Manager will preside at conference. Architect shall record meeting minutes and distribute copies through the Construction Manager.
5. Agenda:
 - a. Execution of Owner-Contractor Agreement
 - b. Issue Notice to Proceed
 - c. Submission of executed bonds and insurance certificates
 - d. Distribution of Contract Documents
 - e. Submission of list of Subcontractors, list of products, schedule of values and progress schedule.
 - f. Designation of responsible personnel representing the parties.
 - g. Procedures and processing of field decision, submittals, substitutions, applications for payments, proposal request, change orders and contract closeout procedures.
 - h. Scheduling
 - i. Review of Federal & State labor law requirements and the District's Labor Compliance Program

E. **PROGRESS MEETINGS**

1. Construction Manager will schedule and administer meetings throughout progress of the work at semi-weekly intervals.
2. Construction Manager will make arrangements for meetings, prepare agenda and preside at meetings. Architect will record minutes (Field Reports), and distribute copies.
3. Attendance required: Owner, Architect, Inspector, Construction Manager, appropriate Prime Contractors (when requested by the Construction Manager, Architect, or Owner). Prime Contractors are welcome to attend at anytime, however their attendance is mandatory only when requested by the Construction Manager, Architect, or Owner.
4. Agenda:
 - a. Review minutes of previous meetings (Field Reports)
 - b. Review work progress
 - c. Field observations, problems, and decisions

- d. Identification of problems which impede planned progress
- e. Review of submittals, schedule, and status of submittals
- f. Review of off-site fabrication and delivery schedules
- g. Maintenance of progress schedule
- h. Corrective measures to regain projected schedules
- i. Planned progress during succeeding work period
- j. Coordination of projected progress
- k. Maintenance of quality and work standards
- l. Effect of proposed changes on progress schedule and coordination
- m. Other business relating to work

F. PRE-INSTALLATION CONFERENCE

- 1. When required in individual specification section, convene a pre-installation conference prior to commencing work of the section.
- 2. Require attendance of parties directly affecting, or affected by, work of the specific section.
- 3. Notify Architect through Construction Manager at least 5 days in advance of meeting date.
- 4. Prepare agenda, preside at conference, record minutes, and distribute copies within two days after conference to participants
- 5. Review conditions of installation, preparation and installation procedures, and coordination with related work.

2. PART 2 PRODUCTS
Not Used

3. PART 3 EXECUTION
Not Used

END OF SECTION

PROJECT COORDINATION

1. PART 1 GENERAL
 - A. REQUIREMENTS INCLUDE
 1. Construction Manager will coordinate the work of the several Prime Contractors for the project.
 2. Each Contractor shall:
 - a. Coordinate work of his own employees and subcontractors.
 - b. Expedite his work to assure compliance with schedules.
 - c. Coordinate his work with that of other prime contractors and work by Owner.
 - d. Comply with orders and instructions of the Architect and Owner through the Construction Manager.
 - B. RELATED REQUIREMENTS
 1. Section 01 31 00 - Project Construction Schedule
 2. Section 01 50 00 - Construction Facilities and Temporary Controls
 - C. CONSTRUCTION ORGANIZATION AND START-UP
 1. Construction Manager shall establish on-site lines of authority and communications:
 - a. Schedule & conduct pre-construction meeting and progress meetings as required
 - b. Establish procedures for intra-project communications:
 - (1) Submittals
 - (2) Schedules
 - (3) Resolution of conflicts
 - c. Interpret contract documents:
 - (1) Consult with the Architect to obtain interpretation
 - (2) Assist in resolution of questions or conflicts which may arise
 - (3) Transmit written interpretations to contractors, and to other concerned parties
 - d. Assist in obtaining permits and approvals:
 - (1) Building permits and special permits required for work or for temporary facilities
 - (2) Verify that contractors and subcontractors have obtained inspections for work and for temporary facilities
 - e. Control the use of the site:
 - (1) Allocate space for each contractor's use for field offices, sheds, work, and work storage areas
 - (2) Establish access, traffic & parking allocations, and regulations
 - (3) Monitor use of site during construction

D. CONSTRUCTION MANAGER DUTIES

1. Construction Schedule
 - a. Prepare a detailed schedule of basic operations for all contractors
 - (1) Each contractor shall prepare sub-schedules to comply with critical phases
 - (2) Recommend to Owner adjustments in schedule to meet required completion dates
 - (3) Adjust schedules of contractors as required
 - (4) Document changes in schedule, and submit to Owner, with recommendation for changes (if any)
2. Process Shop Drawings, Product Data, and Samples
3. Monitor the use of temporary utilities
 - a. Verify that adequate services are provided and maintained
 - b. Coordinate use of Owner's facilities
4. Monitor Contractor's periodic cleaning
 - a. Enforce compliance with specifications
5. Arrange for delivery of Owner-furnished products
6. Changes and substitutions
 - a. Recommend necessary or desirable changes to Owner and to Architect
 - b. Review Contractor's Requests for Changes and substitutions; submit recommendations to Owner and to Architect
 - c. Assist Architect in negotiating change orders
 - d. Promptly notify all Contractors of pending changes and substitutions
7. Payments
 - a. Implement procedures for review and processing of Contractor's payment applications for progress payments and for final payments
 - (1) Review each application for payment, submit recommendations to Architect
8. Maintain reports and records at the job site available to the Architect and the Owner
 - a. Daily log of progress of work of each Contractor
 - b. Records:
 - (1) Contracts
 - (2) Purchase orders
 - (3) Applicable handbooks, codes, and standards
 - c. Obtain information from contractors and maintain file of record documents

E. CONSTRUCTION MANAGER CLOSE-OUT DUTIES

1. Mechanical and electrical equipment start-up:
 - a. Coordinate check-out of utilities, operational systems, and equipment

- b. Record dates of start of operation of systems and equipment
 - c. Submit to Owner written notice of beginning of warranty period for equipment put into service
2. At completion of work of each contract, conduct inspection to assure that:
- a. Specified cleaning has been completed
 - b. Temporary facilities (if any), tools, and equipment have been completely removed from the site
3. Substantial completion:
- a. Conduct an inspection to confirm or supplement Contractor's list of work to be completed or corrected
 - b. Assist Architect with inspection
 - c. Supervise correction and completion of work as established in Certificate of Substantial Completion
4. When Owner occupies a portion of the Project prior to final completion, coordinate established responsibilities of Contractor with Owner
5. Final Completion:
- a. When each contractor determines that work is finally complete, conduct pre-inspection to verify completion of work
 - b. Assist Architect in Final Inspection
6. Administration of contract closeout:
- a. Receive and review Contractor's final submittals
 - b. Transmit to Architect with recommendations for action

END OF SECTION

ALLOWANCES

PART 1 GENERAL

1.1 SUMMARY:

- 1.1.1 Section Includes: Allowances which the Contractor shall provide for designated construction activities in the Work and in his bid.
- 1.1.2 Related Documents: The Conditions of the Contract and other sections of Division apply to this section as fully as if repeated herein.

1.2 DESCRIPTION OF REQUIREMENTS

- 1.2.1 Definitions and Explanations: Certain requirements of the construction related to each allowance are indicated and specified. The allowance has been established instead of additional requirements for that construction, and further requirements thereof will be issued by Change Order.
- 1.2.2 Type of allowance scheduled herein for the Work include the following:
 - 1.2.2.1 Lump sum allowances
- 1.2.3 Selection and Purchase: At earliest feasible date after award of Contract, advise the Architect of scheduled date when final selection and purchase of each product or system described by each allowance must be accomplished in order to avoid delays in performance of the Work.
 - 1.2.3.1 As requested by the Architect, obtain and submit proposals for construction activities involved in each allowance for use in making final selections; include recommendations for selections which are relevant to the proper performance of the work.
 - 1.2.3.2 Purchase products and systems as specifically selected by the Architect.
 - 1.2.3.3 Submit proposals and recommendations, for purchase of products or systems of allowances, in form specified for Change Orders.
- 1.2.4 Change Order Data: Where applicable, include in each change order proposal both the quantities of products being purchased and unit cost, along with the total amount of purchases to be made. When requested, furnish data to substantiate quantities. Indicate applicable taxes and delivery charges.
- 1.2.5 Unit Cost Allowances: Each change order amount for unit cost type allowance shall be based solely on the difference between the actual unit purchase amount and the unit allowance, multiplied by the final measure or count of construction in place with reasonable allowances for cutting losses, tolerances, mixing wastes, normal product imperfections and similar margins.
 - 1.2.5.1 Include installation costs in the purchase amount as part of the allowance.

PART 2 – PRODUCTS (Not Applicable)

PART 3 – EXECUTION

3.1 CASH ALLOWANCES

3.1.1 The following Category Contractors shall include the following noted cash allowances on the bid form to be used solely by the Construction Manager:

3.1.1.1 **Category 4 \$100,000.00**

3.1.2 The Category Contractor and any Subcontractor shall be permitted to charge overhead and profit as per Supplemental General Conditions 00 80 00, Article 7.7.1. If any allowance amount (in whole or in part) is unused at any given point during the project, the Category Contractor shall credit back the full or unused portion of the allowance amount stipulated.

END OF SECTION

PROJECT CONSTRUCTION SCHEDULE

1. PART 1 GENERAL

A. SUMMARY

1. The work includes the preparation and submission of the sub-schedules and reports specified herein, including the up-to-date maintenance thereof as required by the CONSTRUCTION MANAGER. The Conditions of the Contract and the other sections of Division 1 apply to this section as fully as if repeated herein.

B. CONSTRUCTION SCHEDULE

1. The enclosed "PROJECT CONSTRUCTION SCHEDULE" is composed of tentative starting dates and fixed durations for each major activity of work on the project.
 - a. Within 1 week of Contractor's receipt of District's Notice Of Award Letter, each Prime Contractor will be required to provide the following details to the CONSTRUCTION MANAGER:
 - b. Proposed manpower loading of each scheduled field activity in order to properly complete same within the PROJECT CONSTRUCTION SCHEDULE'S fixed durations.
 - c. Establish submittal lead times which will allow for the proper review time by the Architect without delaying the timely scheduled procurement of products, materials, and/or assemblies.
 - d. Establish fabrication and/or procurement lead times which will maintain that no operation will be delayed from its scheduled starting date.
2. The Superintendent for each contractor shall submit, to the CONSTRUCTION MANAGER'S Project Superintendent, a brief written report by 12:00 noon on EACH AND EVERY WORKING DAY in which contractor is performing work on the project site which identifies each of the following:
 - a. Schedule activity or activities currently under construction that day and the number of mechanics assigned to work the full or majority of the day on same.
 - b. Total number of mechanics on the project that day which will work the full day.
 - c. Estimated 100% completion date of each activity or activities currently under construction that day.
 - d. Specific problems, if any, with the actions and/or inactions of other contractors, the DISTRICT, CONSTRUCTION MANAGER, ARCHITECT, consulting engineers, or the contract documents which are preventing CONTRACTOR'S work from being properly completed per the schedule.

3. CONTRACTOR must coordinate all work with all other contractors on the project through the CONSTRUCTION MANAGER'S Project Superintendent in order to complete each activity of their work within the fixed durations assigned to same as shown on the "PROJECT CONSTRUCTION SCHEDULE".
4. Schedule start dates as shown on the PROJECT CONSTRUCTION SCHEDULE are referred to as "tentative" only to the affect that said dates will be continually adjusted either forward or backward by the CONSTRUCTION MANAGER as the project progresses. Upon receipt of 48 hours advanced notice by the CONSTRUCTION MANAGER to begin work on an activity, CONTRACTOR must properly man and perform the work of said activity and complete same within the noted number of consecutive working days or less assigned to said activity in the PROJECT CONSTRUCTION SCHEDULE.
5. CONTRACTOR is expected to continually monitor all phases of the project field construction progress in order to insure that CONTRACTOR'S work is properly implemented into the overall project improvements.
6. CONTRACTOR is expected to provide properly trained and skilled mechanics in adequate numbers and equipment needed and/or required in order to properly and efficiently complete all work activities per the schedule. Should CONSTRUCTION MANAGER have reason to believe at any time that CONTRACTOR is not providing an adequate workforce armed with the proper materials and/or equipment, CONSTRUCTION MANAGER shall give CONTRACTOR written notice of same? Activity Manpower loading submitted in item 1.B.1.b above shall in no way limit the responsibility of the CONTRACTOR to perform to the fixed duration requirements of the PROJECT CONSTRUCTION SCHEDULE.
7. Contractor acknowledges by submission of their bid proposal and signing of the CONTRACT AGREEMENT that they take no exception to the fixed duration of time allocated for each of their own assigned tasks per the PROJECT CONSTRUCTION SCHEDULE. No additional compensation will be considered.

END OF SECTION

CONTRACTOR SAFETY

A. HEALTH AND SAFETY POLICY

1. The policy of the District is to promote safety at a level to minimize personal injury and potential property damage.
2. Employees of contractors working on this project are required to meet or exceed all established and recognized codes and standards for safety and protection of personnel and property.
3. The safety guidelines included here are made available to you, the Contractor, as an extension of the safety clause in your Contract General Conditions Article 10.
4. These guidelines are not intended to be complete in every detail, but are merely of a general nature. The separate contractors are in no way relieved of their responsibilities for safety of persons and property, and compliance with all statutes, rules, regulations and orders applicable to the conduct of the work.
5. The possession, use, or sale of any alcoholic beverage or illegal controlled drug substance will not be permitted on or immediately adjacent to the job site by any contractor, contractor employee, and subcontractor employer or associate.
6. The abuse of prescribed medication will not be permitted on or immediately adjacent to the job site by any contractor, contractor employee, subcontractor employee or associate.
7. This Contractor, and other contractors, share the responsibility of monitoring and enforcing, as necessary, A.5 and A.6 above. Any known, (or with due cause believed to be), violator of A.5 or A.6 shall be immediately reported to the Construction Manager.
8. The District reserves the right to take corrective action, as deemed in the best interest of the project and the District, for violation of any health or safety standard. This corrective action may include, but is not limited to; removal (from the job site) any unsafe tools/equipment, temporary work stoppage for any unhealthy or unsafe condition, immediate removal (from the job site) any person that is unwilling or incapable of conducting themselves in a manner that promotes a healthy and safe working atmosphere. Any person found to be repeatedly in violation of health and/or safety standards will be permanently removed from the site.

B. RESPONSIBILITIES

1. The District demands that all project contractors perform in a reasonable and safe manner.
2. The contractors working on this project have the ultimate and total responsibility to conduct a sound accident control program as it pertains to their work and their employees, as well as to ensure safe working conditions for employees of other

contractors.

3. The Contractor will ensure his employees cooperate with and coordinate safety matters with other contractors to form a joint safety effort.
4. Employees who have been, or will be exposed to excessive (measured against applicable standards) levels of toxic materials or harmful physical agents shall be notified by the Contractor. Notice of corrective action being taken shall be provided to the employees. Accurate records must be kept of all exposures which are required to be monitored under the State and Federal Codes.
5. In the event of a defense by the Contractor against unsafe independent employee actions, the Appeals Board requires that you must show evidence of the following:
 - a. That the employee was experienced in the job being performed;
 - b. That you as the employer have a well devised safety program which includes training employees in safety matters relating to their individual job assignments;
 - c. That you effectively enforce your safety program;
 - d. That you have and enforce a policy of sanctions against employees who violate your safety program; and
 - e. That the employee caused a safety infraction which he or she knew was in violation of your safety requirement.

C. SAFETY ACTIVITIES

1. Contractors will conduct or initiate:
 - a. Safety program as required by current State of California requirements.
 - b. Weekly "tool box" safety meetings between Contractor and Contractor's supervisors, foremen, employees, and subcontractors working on the project; and
 - c. Weekly safety inspections of your work area and those areas of work under your responsibility or shared responsibility as well as taking any other necessary safety precautions.

D. REPORTS

1. Submit all preliminary, periodic and special reports to the Construction Manager. The Contractor is in no way relieved of the requirements for submission of reports to any agency or authority.
 - a. All reports listing deficiencies, accidents, or injuries shall show corrective action taken.

- b. A weekly status and summary report of each "tool box" meeting held and items discussed.
 - c. A weekly status report of inspection results. The attached status forms are for your convenience only.
 - d. A continuing list of deficiencies found, date identified, responsible party, corrective action and date corrected.
 - e. Accident reports and injury forms. Submit a copy of one of the following to the Construction Manager for each case:
 - 1) California Division of Labor Statistics and Research Form 5020 (latest rev.), or;
 - 2) Federal OSHA Form 101, or;
 - 3) Insurance Company form similar to 1 or 2 above.
 - f. A copy of CAL/OSHA Form 200 "Log and Summary of Occupational Injuries and Illness."
2. Special Reports
- a. Notify the Construction Manager immediately of any accident involving injury to personnel or property; and complete written reports within 24 hours of a death or injury of five (5) or more employees as a result of one accident.
 - b. Copies of all toxic or harmful agent reports (See paragraph B.4.)
3. Governmental Reports
- a. Notification of governmental authorities is the responsibility of each affected contractor.

E. SAFETY DEFICIENCY CORRECTION

- 1. All safety deficiencies will be corrected by contractors in accordance with the following priorities.
 - a. Immediate correction of items with any probability of major or minor injury to people.
 - b. Correction immediately of any accident probability which could involve people and/or equipment.
 - c. Correction within one day (or sooner) of potential injury or damage to property.

F. OUTSIDE SAFETY INSPECTIONS

1. Unannounced inspections by city, state or federal safety agencies or insurance companies may occur.
 - a. Contractors are to escort representatives of these agencies or companies directly to the Construction Manager and assist him as required or directed.
 - b. If the Construction Manager is not available, the Contractor's foreman or representative shall accompany the inspector on the inspection.

G. INVESTIGATING

1. All injuries are to be investigated by the contractors and reported.
2. The Construction Manager shall be notified prior to proceeding with an investigation.

H. SAFETY STANDARDS AND CODE

1. All contractors are to provide their job supervision with applicable safety code publications and ensure they are familiar with the contents.
2. Occupation Safety and Health Administration Standards (latest applicable edition) on the designated applicable safety standards.
3. In states with OSHA approved plans, state codes will take precedence unless federal standards are more stringent, in which case federal standards shall apply.
4. On General Services Administration (GSA) projects, applicable sections of the GSA Manual Accident & Fire Prevention on Construction and Alteration Work will apply in addition to all other codes and standards.
5. All code and standard conflicts will be resolved by applying the most restrictive code and/or standard.
6. Suggested references for contractors are:
 - a. Safety & Health Regulation for construction, U.S. Department of labor, OSHA, Volume 37, No. 243.
 - b. Construction safety orders, State Standard, CAL/OSHA, state of California, latest edition.
 - c. GSA Manual - GSA -PBSP 5900.3.
 - d. U.S. Army Engineering Manual - BM 385-1.
 - e. Accident Prevention, Associated General Contractors.
 - f. A Short Guide to the California Occupational Safety and Health Act. -

National Federation of Independent Business, 150 West 20th Avenue, San Mateo, California 94403.

I. REQUIRED NOTICES: TO BE VISIBLY DISPLAYED

1. Workers' Compensation Insurance Notice
2. OSHA poster: Safety and Health Protection on the job.
3. State of California Department of Human Resources: Notice to Employees Unemployment Insurance - Disability Insurance.
4. Hard Hat Area Signs.
5. List of ambulances, doctors and hospitals with telephone numbers which can be called during an emergency.
6. Name and title of the safety representative from each contractor's organization.
7. Any other safety signs, slogans, etc. that will improve the general awareness of a joint safety program.

J. PERMITS

1. Permits from the Division of Industrial Safety are required before contractors may undertake the following kinds of work:
 - a. Construction of trenches or excavations which are 5 feet or more deep, into which a person is required to descend;
 - b. Construction of any building, structure, false work, or scaffolding more than three stories high.
 - c. Demolition of any building, structure, false work, or scaffolding more than three stories high.
2. The Division of Industrial Safety may investigate or confer with the employer before the start of work. If a pre-job safety conference between the Division of Industrial Safety personnel and the employer is a requirement specified by the Division of Industrial Safety at the time the permit is issued, employees or their representatives are to be included at the conference.
3. Permits must be posted at or near each place of employment requiring a permit. If posting at the actual job site is not possible, the permit must be available for inspection at all times at the site, or, in the case of a mobile unit, at the employer's head office in the area.
4. Additional permits may be required from the Division of Industrial Safety or other applicable governmental agencies. It is the responsibility of each contractor to determine, procure, and pay for their own such permits.

SAFETY STATUS FORMS

THIS REPORT IS TO SERVE AS A MINIMUM STANDARD GUIDELINE AND DOES NOT INCLUDE JOB OR TRADE SPECIFIC ITEMS OR CONDITIONS. SAID ITEMS OR CONDITIONS SHOULD BE ADDED BY CONTRACTOR ON THE LAST PAGE ENTITLED “COMMENTS AND REMARKS”.

#	QUESTION / CHECKLIST COMMENT	YES	NO	N/A
A.	FIRE PROTECTION AND PREVENTION:			
1.	Are all flammable liquid containers clearly identified?			
2.	Are all flammable liquid containers UL or FM listed?			
3.	Have proper storage practices for flammables been observed?			
4.	Have the proper type & adequate number of fire extinguishers been observed at the jobsite?			
5.	Are extinguishers readily accessible and serviced regularly?			
6.	Are hydrants clear and accessible for Fire Department personnel?			
B.	ELECTRICAL			
1.	Are all switch gear, panels, and devices that are energized marked and / or guarded to prevent accidental contact?			
2.	Are lockout devices available and used on all circuits and equipment that could become energized while work is being performed?			
3.	Are all temporary circuits properly guarded and grounded?			
4.	Are all extension cords in continuous lengths without splices or tape?			
5.	Are GFCI's being used? If not, is Assured Equipment Grounding Conductor Program being followed?			
6.	If temporary lighting is provided, are bulbs protected against accidental breakage?			
7.	Are there a sufficient number of temporary outlets on the job site?			
8.	Are there any visual signs of outlet overloading?			

#	QUESTION / CHECKLIST COMMENT	YES	NO	N/A
C.	HAZARD COMMUNICATION:			
1.	Does the Hazard Communication Program include a list of hazardous chemicals?			
2.	Does the Hazard Communication Program include container labeling?			
3.	Does the Hazard Communication Program include “Material Safety Data Sheets” (MSDS)?			
4.	Does the Hazard Communication Program include employee training?			
5.	Does the Hazard Communication Program include personal protective equipment (PPE)?			
6.	Does the Hazard Communication Program include emergency response procedures, information, & phone numbers?			
7.	Does the Hazard Communication Program include a list of hazards for non-routine tasks?			

8.	Does the Hazard Communication Program include procedures for informing other contractors of hazardous conditions and / or procedures?			
9.	Does the Hazard Communication Program include adequate posting of signage & warning labels?			
10.	Is a copy of the Hazardous Communication Program at this job site?			
D.	EXCAVATION / TRENCHING			
1.	Have utility companies been notified of proposed excavation work (one-call system)?			
2.	Are overhead utility lines noted and precautions taken to avoid contact by cranes, backhoes, or other heavy equipment?			
3.	Is the excavation inspected daily or more frequently when there is a change in weather or environment that could affect the soil?			
4.	If needed, are barricades, stop logs, etc. properly located?			
5.	Are excavations five (5) feet or deeper correctly sloped, benched, shored, or is a trench box (shield) used?			
6.	Is a ladder or other means of exit (egress) provided in trenches or excavations four (4) feet or deeper?			
7.	When ladders are used, do they extend three (3) feet above the surface and are they secured?			
8.	Are shoring and shielding systems inspected daily by a competent person?			
E.	SCAFFOLDING			
1.	Are scaffold components visibly free of any physical damage (no bent supports or cross bracing)?			
2.	Is scaffolding properly erected with all pins and braces in place and locked?			
3.	Are rolling scaffolds equipped with locking wheels?			
4.	Are wheels locked when scaffold is in use?			
5.	Is scaffold erected on a firm and substantial surface?			
6.	Is planking of a scaffold grade?			
7.	Is planking in good condition and properly installed?			
8.	Are toe boards and guardrails in place on scaffolds over 10 feet?			
9.	Are workers on scaffolding protected from falling objects if overhead hazards exist?			
10.	Is a ladder provided for access to scaffold work platform?			
F.	BARRICADING			
1.	Are floor openings planked and secured or barricaded?			
2.	Is a flag person provided to direct traffic when needed?			
3.	Are open excavation, road drop offs, manholes, & uneven surfaces barricaded?			
G.	LADDERS			
1.	Is the proper ladder for the job being used?			
2.	Are ladders in good condition (no missing or broken rungs, etc.)?			
3.	Is there a need for and / or are there safety shoes / cleats on the bottom of ladders?			
4.	Are non-conductive ladders available for use around live wiring?			
5.	Are ladders tied-off at top or otherwise secured?			
6.	Do side rails extend 36 inches above the top of the landing?			
7.	Are step ladders fully opened when in use?			
H.	PERSONAL PROTECTIVE EQUIPMENT			
1.	Is hearing protection available for personnel that may be exposed to noisy conditions?			

2.	Is respiratory protection available to personnel and is it being used when conditions require same			
3.	Are safety harnesses, belts, lifelines, and lanyards available and being used?			
4.	Are personnel using gloves when handling sharp or rough material?			
I.	MEDICAL			
1.	Are first-aid kits available and properly stocked?			
2.	Are all emergency phone numbers posted?			
3.	Are all employees aware of the address of the site or capable of giving proper directions to emergency personnel?			
4.	Is anyone trained in first-aid and CPR?			
J.	TOOLS (hand & power)			
1.	Are tools free of any obvious physical damage?			
2.	Are tools inspected for frayed and damaged cords?			
3.	Are tools and cords properly grounded and are ground pins in good condition?			
4.	Are the handles on all tools in good condition (not bent, splintered, or broken)?			
5.	Are all hoses on air or hydraulic tools in good condition?			
6.	Are all shields and guards in place on the tools and in good condition?			
7.	Has each tool and / or equipment operator received proper operating and safety instruction for each tool and / or piece of equipment which he or she is using?			
8.	Has each user of a powder actuated tool been properly certified and are their certifications current?			

#	QUESTION / CHECKLIST COMMENT	YES	NO	N/A
K.	WELDING AND CUTTING			
1.	Welding goggles / helmet, gloves, and clothing being used by each welder			
2.	Inspection for fire hazards after welding stops			
3.	Are gas cylinders, hoses, regulators, torches, torch tips, and welding carts in good working order and are same being properly secured?			
L.	HOISTS, CRANES AND DERRICKS			
1.	Are cables and sheaves checked?			
2.	Are slings hooks, eyelets, and chokes inspected?			
3.	Are load capacities posted in cab?			
4.	Are power lines at a safe distance?			
5.	Are crane inspection logs with crane?			
M.	FLOORS, WALL OPENINGS, STAIRWAYS			
1.	Are floor and roof openings guarded by properly constructed guardrails or a properly reinforced and secured cover?			
2.	Are open-sided floors and platforms six feet or more above the ground guarded with a properly constructed railing?			
3.	Are stairs with four or more risers equipped with standard hand rail construction?			

4.	Are runways four feet or more above the ground properly guarded?			
CONTRACTOR SAFETY – “COMMENTS AND REMARKS”				

END OF DOCUMENT

CLEANING

1. PART 1 GENERAL
 - A. SECTION INCLUDES
 1. Cleanup during construction of the building before acceptance by the District. Each contractor will be responsible for cleanup of their work and legal disposal and haul away of their debris offsite.
 - B. RELATED DOCUMENTS
 1. The Conditions of the Contract and other sections of Division 1 apply to this section as fully as if repeated herein.
2. PRODUCTS
 - A. MATERIALS
 1. Use cleaning materials which will not create hazards to health or property and which will not damage materials. Use cleaning materials and methods recommended by the manufacturer of the surface material to be cleaned. Use cleaning material only on surfaces recommended by the cleaning material manufacturer.
3. EXECUTION
 - A. CLEANUP DURING CONSTRUCTION
 1. It is required that the entire project be kept in a neat and orderly condition, and the Construction Manager may, at any time during construction, order a general cleanup of the site as a part of the work.
 2. Dispose of waste, trash, and debris in a safe, acceptable manner, in accordance with applicable laws and ordinances and as prescribed by authorities having jurisdiction. Bury no such waste material and debris on the site. Burning of trash and debris on the site will not be permitted.
 3. Location of dump for trash and debris and length of haul is the Contractor's responsibility.
 4. If any contractor has not substantially commenced their clean-up operations as required by the Construction Manager within 24 hours after receiving a fax notice from the Construction Manager, the District may without further notice to Contractor, commence said clean-up at the Prime Contractor's cost. All costs incurred as a result of the District's clean-up on behalf of the Contract shall be deducted from the Contractor's contract price by unilateral change order. In the event the District's clean-up involves debris of more than one prime contractor of the District, the Construction Manager shall make a determination as to the percentage owed by each contractor and this determination shall be final & binding to all contractors involved. Although it is understood by all parties that the District has the right to clean-up the debris of any contractor after giving said contractor 24 hour fax notice, it is NOT the District's obligation to do so. The sole responsibility & liability of debris on the site remains that of the contractor generating same.

5. Five percent (5%) of each Contractor's bid will automatically be held in abeyance within their "contract schedule of values" for clean-up. If, in the Construction Manager Superintendent's opinion, the Contractor is maintaining a clean project, a pro-rata share of this clean-up budget will be paid monthly to the Contractor in accordance with their approximate aggregate percentage of completion of the project. If the Contractor fails to heed written directives to clean-up during the course of the project, the work will be done at the Contractor's expense and a unilateral deductive change order will be written against their contract with the District for all costs incurred by the District for the clean-up. THE ESTABLISHMENT OF THIS FIVE PERCENT (5%) BUDGET FOR CLEAN-UP IN NO WAY LIMITS THE COST TO THE CONTRACTOR FOR MAINTAINING A CLEAN PROJECT. In the event that the Contractor's failure to maintain a clean project causes or contributes to an accident or property damage, neither the District, Construction Manager, or any of their respective employees shall be held responsible or liable for damages because of their failure to clean-up the Contractor's debris, materials, tools, or equipment.

END OF SECTION

**SECTION 09 65 00
RESILIENT FLOORING**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Resilient Plank flooring.
- B. Resilient tile flooring.
- C. Resilient base.
- D. Installation accessories.

1.02 RELATED REQUIREMENTS

- A. Section 01 61 16 - Volatile Organic Compound (VOC) Content Restrictions.
- B. Section 03 30 00 - Cast-in-Place Concrete: Restrictions on curing compounds for concrete slabs and floors to receive adhesive-applied resilient flooring.
- C. Section 09 05 61 - Common Work Results for Flooring Preparation: Removal of existing floor coverings, cleaning, and preparation.
- D. Section 09 05 61 - Common Work Results for Flooring Preparation: Concrete slab moisture and alkalinity testing and remediation procedures.
 - 1. Moisture sealer required under resilient flooring.

1.03 REFERENCE STANDARDS

- A. ADA Standards - Americans with Disabilities Act (ADA) Standards for Accessible Design.
- B. ASTM E648 - Standard Test Method for Critical Radiant Flux of Floor-Covering Systems Using a Radiant Heat Energy Source.
 - 1. Use 2015e1 as indicated in 2019 CBC Referenced Standards.
- C. ASTM F150 - Standard Test Method for Electrical Resistance of Conductive and Static Dissipative Resilient Flooring.
- D. ASTM F970 - Standard Test Method for Measuring Recovery Properties of Floor Coverings after Static Loading.
- E. ASTM F1700 - Standard Specification for Solid Vinyl Floor Tile.
- F. ASTM F1861 - Standard Specification for Resilient Wall Base.
- G. ASTM F1913 - Standard Specification for Vinyl Sheet Floor Covering Without Backing.
- H. NFPA 253 - Standard Method of Test for Critical Radiant Flux of Floor Covering Systems Using a Radiant Heat Energy Source.
- I. RFCI (RWP) - Recommended Work Practices for Removal of Resilient Floor Coverings.

1.04 SUBMITTALS

- A. See Section 01 30 00 - Administrative Requirements, for submittal procedures.
- B. Product Data: Provide data on specified products, describing physical and performance characteristics; including sizes, patterns and colors available; and installation instructions.

- C. Shop Drawings: Indicate seaming plans and floor patterns.
- D. Verification Samples: Submit two samples, 2 by 2 inch in size illustrating color and pattern for each resilient flooring product specified.
- E. Concrete Subfloor Test Report: Submit a copy of the moisture and alkalinity (pH) test reports.
- F. Certification: Prior to installation of flooring, submit written certification by flooring manufacturer and adhesive manufacturer that condition of subfloor is acceptable.
- G. Manufacturer's Qualification Statement.
- H. Installer's Qualification Statement.
- I. Maintenance Data: Include maintenance procedures, recommended maintenance materials, and suggested schedule for cleaning, stripping, and re-waxing.
- J. Maintenance Materials: Furnish the following for District's use in maintenance of project.
 - 1. See Section 01 60 00 - Product Requirements, for additional provisions.
 - 2. Extra Flooring Material: 100 square feet of each type and color.
 - 3. Extra Wall Base: 50 linear feet of each type and color.

1.05 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Company specializing in manufacturing specified flooring with minimum three years documented experience.
- B. Installer Qualifications: Company specializing in installing specified flooring with minimum three years documented experience.
- C. Testing Agency Qualifications: Independent firm specializing in performing concrete slab moisture testing and inspections of the type specified in this section.

1.06 DELIVERY, STORAGE, AND HANDLING

- A. Upon receipt, immediately remove any shrink-wrap and check materials for damage and the correct style, color, quantity and run numbers.
- B. Store all materials off of the floor in an acclimatized, weather-tight space.
- C. Maintain temperature in storage area between 55 degrees F and 90 degrees F.

1.07 FIELD CONDITIONS

- A. Store materials for not less than 48 hours prior to installation in area of installation at a temperature of 70 degrees F to achieve temperature stability. Thereafter, maintain conditions above 55 degrees F.

PART 2 PRODUCTS

2.01 REGULATORY REQUIREMENTS

- A. Provide products complying with the most stringent requirements of local, state, and federal regulations; where requirements of the contract documents exceed those of regulations, comply with the contract documents.

- B. Requirements for Physically Disabled: Provide flooring meeting slip-resistant requirements of California Code of Regulations (CCR), Title 24, Part 2, Chapter 11B and ADA Standards, latest amendment.
 - 1. Flooring surface shall be stable, firm, and slip resistant. CBC Section 11B-302.1 General.
 - 2. Flooring surface shall demonstrate a dynamic coefficient of friction of at least 0.42 per DCOF AcuTest ANSI 137.1 Section 9.6 and ANSI B101.3 (using a BOT-3000 testing unit) will be accepted as meeting the intent of slip resistance; CBC 11B-302 Floor or Ground Surfaces and ADA Standards.
 - a. Ramp surface: Provide DCOF value of 0.46.
- C. Comply with CalGreen Building Standards: 80 percent of the installed resilient flooring shall meet one of the following:
 - 1. VOC Content: Certified as Low Emission by one of the following :
 - a. SCS Floorscore; www.scs-certified.com. CalGreen 5.504.4.6.1.
 - b. Compliant with the VOC emission limits and testing requirements specified in the California Department of Public Health's 2010 "Standard Method for the Testing and Evaluation Chambers", Version 1.1, February 2010. CalGreen 5.504.4.6.2.
 - c. Compliant with the Collaborative for High Performance Schools California (CA-CHPS) Criteria Interpretation for EQ 7.0 and EQ 7.1 (formerly EQ 2.2) dated July 2012 and listed in the CHPS High Performance Product Database; www.chps.net/manual/lem_table.htm. CalGreen 5.504.4.6.3.
 - d. Products certified under UL GreenGuard Gold; www.greenguard.org. CalGreen 5.504.4.6.4.

2.02 ENVIRONMENTALLY PREFERABLE PRODUCTS

- A. Comply with ANSI / NSF 332.

2.03 PLANK RESILIENT FLOORING

- A. Resilient Plank 7"x48" Flooring: Homogeneous without backing, with color and pattern throughout full thickness.
 - 1. Basis of Design Product: Patcraft Products
 - 2. Minimum Requirements: Comply with ASTM F1913.
 - 3. VOC Content Limits: As specified in Section 01 61 16.
 - 4. Thickness: 20 MIL.
 - 5. Integral coved base with cap strip.
 - 6. Color: 7"x48" 00570 Shadow.

2.04 RESILIENT BASE

- A. Resilient Base: ASTM F1861, Type TS rubber, vulcanized thermoset; top set Style B, Cove.
 - 1. Manufacturers:
 - a. Patcraft Flooring: Patcraft.com
 - b. Burke Flooring: www.burkeflooring.com/#sle.
 - c. Johnsonite, a Tarkett Company: www.johnsonite.com.
 - d. Roppe Corp: www.roppe.com.
 - e. Substitutions: See Section 01 60 00 - Product Requirements.

2. Height: 4 inch.
3. Thickness: 0.125 inch.
4. Finish: Satin.
5. Length: Roll.
6. Color: As indicated on drawings.
7. Accessories: Premolded external corners and internal corners.

2.05 ACCESSORIES

- A. Subfloor Filler: White premix latex; type recommended by adhesive material manufacturer.
- B. Primers, Adhesives, and Seam Sealer: Waterproof; types recommended by flooring manufacturer.
 1. VOC Content Limits: As specified in Section 01 61 16.
- C. Moldings, Transition and Edge Strips: Same material as flooring.
- D. Filler for Coved Base: Plastic.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that surfaces are flat to tolerances acceptable to flooring manufacturer, free of cracks that might telegraph through flooring, clean, dry, and free of curing compounds, surface hardeners, and other chemicals that might interfere with bonding of flooring to substrate.
- B. Cementitious Subfloor Surfaces: Verify that substrates are ready for resilient flooring installation by testing for moisture and alkalinity (pH).
 1. Test in accordance with Section 09 05 61.
 2. Obtain instructions if test results are not within limits recommended by resilient flooring manufacturer and adhesive materials manufacturer.
- C. Environmental Condition: Comply with flooring manufacturer's instructions and recommendations.
 1. Verify that ambient and surface temperatures and humidity conditions are in compliance.
- D. Verify that required floor-mounted utilities are in correct location.
- E. Material Inspection:
 1. In accordance with manufacturer's installation requirements, visually inspect materials prior to installation.
 2. Material with visual defects shall not be installed.
 3. Labor costs required to replace material installed with visual defects shall be the responsibility of the installation contractor.

3.02 PREPARATION

- A. Prepare floor substrates for installation of flooring in accordance with Section 09 05 61.
- B. Clean substrate.

3.03 INSTALLATION - GENERAL

- A. Starting installation constitutes acceptance of sub-floor conditions. Beginning of installation means acceptance of existing substrate and site conditions and assumes responsibility for correcting unsuitable conditions at no additional cost to the District.
- B. Install in accordance with manufacturer's written instructions.
 - 1. Compliance: Comply with manufacturer's product data, including product technical bulletins, product catalog installation instructions, and product carton instructions for installation.
- C. Adhesive-Applied Installation:
 - 1. Spread only enough adhesive to permit installation of materials before initial set.
 - 2. Fit joints and butt seams tightly.
 - 3. Set flooring in place, press with heavy roller to attain full adhesion.
- D. Where type of floor finish, pattern, or color are different on opposite sides of door, terminate flooring under centerline of door.
- E. Scribe flooring to walls, columns, cabinets, floor outlets, and other appurtenances to produce tight joints.
- F. Install feature strips where indicated.

3.04 INSTALLATION - SHEET FLOORING

- A. Lay flooring with joints and seams parallel to longer room dimensions, to produce minimum number of seams. Lay out seams to avoid widths less than 1/3 of roll width; match patterns at seams.
- B. Seams are prohibited in bathrooms, kitchens, toilet rooms, and custodial closets.
- C. Seal seams by heat welding where indicated.
- D. Coved Base: Install as detailed on drawings, using coved base filler as backing at floor to wall junction. Extend sheet flooring vertically to height indicated, and cover top edge with metal cap strip.

3.05 INSTALLATION - TILE FLOORING

- A. Mix tile from container to ensure shade variations are consistent when tile is placed, unless otherwise indicated in manufacturer's installation instructions.
- B. Lay flooring with joints and seams parallel to building lines to produce symmetrical pattern.
- C. Install plank tile with a random offset of at least 6 inches from adjacent rows.

3.06 INSTALLATION - RESILIENT BASE

- A. Fit joints tightly and make vertical. Maintain minimum dimension of 18 inches between joints.

- B. Miter internal corners. At external corners, use premolded units. At exposed ends, use premolded units.
- C. Install base on solid backing. Bond tightly to wall and floor surfaces.
- D. Scribe and fit to door frames and other interruptions.

3.07 FIELD QUALITY REQUIREMENTS

- A. Manufacturer's Field Services: Upon District's request and with at least 72 hours notice, provide manufacturer's field service consisting of product use recommendations and periodic site visit for inspection of product installation in accordance with manufacturer's instructions.

3.08 CLEANING

- A. Remove excess adhesive from floor, base, and wall surfaces without damage.
- B. Clean in accordance with manufacturer's written instructions.
- C. Installation Clean-Up: Upon completion of installation in a room or area, clean flooring and adjacent surfaces.
 - 1. Sweep or vacuum floor thoroughly.
 - 2. Do not wash floor until time period recommended by resilient flooring manufacturer has elapsed to allow resilient flooring to become well-sealed in adhesive.
 - 3. Remove excess adhesive or other surface blemishes, using appropriate cleaner recommended by resilient flooring manufacturers.
- D. Initial Cleaning: After adhesive has set but no sooner than 5 days after installation, wash resilient tile flooring with a neutral type cleaning solution in accordance with manufacturer's instructions and recommendations. Rinse thoroughly with clear, cool water but do not flood floor.
 - 1. After completion of installation, apply one coat of polish, if recommended by manufacturer, and buff to even luster.
 - 2. After final cleaning, apply second coat of polish as recommended by tile manufacturer and buff to even luster.
- E. Final Cleaning: Thoroughly clean resilient tile flooring and accessories in accordance with final cleaning specified in Section 01 70 00 - Execution and Closeout Requirements.
 - 1. Clean resilient flooring not more than 4 days prior to date scheduled for inspections intended to establish date of substantial completion in each area of Project.
 - 2. Clean resilient flooring by method recommended by resilient flooring manufacturer, including stripping and application of additional floor polish and buffing to even luster.

3.09 PROTECTION

- A. Prohibit traffic on resilient flooring for 48 hours after installation.
- B. From the time of laying until Acceptance, protect flooring from damage.
 - 1. Lay reinforced kraft paper runners and provide barricades and signs as necessary to prevent construction traffic on completed installations.

2. Protect resilient flooring against damage from rolling loads for initial period following installation by covering with plywood or hardboard. Use dollies to move stationary equipment or furnishings across floors.
3. Remove and replace defects which develop such as damaged, loose or broken tile and resilient accessories.

END OF SECTION

SECTION 09 68 16
CARPETING

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Carpet, stretched-in with cushion underlay and direct-glued.
- B. Carpet tile walk-off mat.
 - 1. **Walk-off tiles inside carpeted doorway:**
 - a. **Single Doors: 4-1/2 by 4-1/2 feet (approximate).**
 - b. **Double Doors & Main Walks: 7-1/2 by 9 feet.**

1.02 RELATED REQUIREMENTS

- A. Section 01 61 16 - Volatile Organic Compound (VOC) Content Restrictions.
- B. Section 01 74 19 - Construction Waste Management and Disposal: Reclamation/Recycling of new carpet scrap, new cushion scrap, removed carpet, and removed carpet cushion.
- C. Section 03 30 00 - Cast-in-Place Concrete: Restrictions on curing compounds for concrete slabs and floors to receive adhesive-applied carpet.
- D. Section 09 05 61 - Common Work Results for Flooring Preparation: Independent agency testing of concrete slabs, removal of existing floor coverings, cleaning, and preparation.

1.03 REFERENCE STANDARDS

- A. AATCC Test Method 134 - Electrostatic Propensity of Carpets; 2016.
- B. AATCC Test Method 16 - Colorfastness to Light; 2004, with Editorial Revision (2010).
- C. ASTM D1335 - Standard Test Method for Tuft Bind of Pile Yarn Floor Coverings; 2017, with Editorial Revision (2018).
- D. ASTM D2859 - Standard Test Method for Ignition Characteristics of Finished Textile Floor Covering Materials; 2016.
- E. ASTM D5848 - Standard Test Method for Mass Per Unit Area of Pile Yarn Floor Coverings; 2010e1.
- F. ASTM E648 - Standard Test Method for Critical Radiant Flux of Floor-Covering Systems Using a Radiant Heat Energy Source; 2017.
- G. ASTM E662 - Standard Test Method for Specific Optical Density of Smoke Generated by Solid Materials; 2018.
- H. CRI 104 - Standard for Installation of Commercial Carpet; 2015.
- I. CRI (GLP) - Green Label Plus Testing Program - Certified Products; Current Edition.
- J. NFPA 253 - Standard Method of Test for Critical Radiant Flux of Floor Covering Systems Using a Radiant Heat Energy Source; 2015.

1.04 SUBMITTALS

- A. See Section 01 30 00 - Administrative Requirements, for submittal procedures.

- B. Product Data: Provide data on specified products, describing physical and performance characteristics; sizes, patterns, colors available, and method of installation.
- C. Shop Drawings: Indicate seaming plan, method of joining seams, direction of carpet pile and pattern, location of edge moldings and edge bindings.
- D. Samples: Submit two samples 12 by 12 inch in size illustrating color and pattern for each carpet material specified.
- E. Submit two, 6 inch long samples of resilient base, edge strip, and base gripper for each color specified.
- F. Manufacturer's Installation Instructions: Indicate special procedures.
- G. Maintenance Data: Include maintenance procedures, recommended maintenance materials, and suggested schedule for cleaning.
- H. Maintenance Materials: Furnish the following for District's use in maintenance of project.
 - 1. See Section 01 60 00 - Product Requirements, for additional requirements.
 - 2. Extra Carpet: 200 sq ft of each type, color, and pattern installed.

1.05 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Company specializing in manufacturing specified carpet with minimum three years documented experience.
- B. Installer Qualifications: Company specializing in installing carpet with minimum three years documented experience.

1.06 FIELD CONDITIONS

- A. Store materials in area of installation for minimum period of 24 hours prior to installation.
 - 1. Store inside, in well ventilated area, protected from weather, moisture and soiling. Store rolls flat, not standing on end.
- B. Maintain minimum 70 degrees F ambient temperature 24 hours prior to, during and 24 hours after installation.
- C. Deliver carpet materials in original mill protective wrapping with mill register numbers and tags attached.
- D. Ventilate installation area during installation and for 72 hours after installation.

1.07 WARRANTY

- A. Carpet Warranty: Provide 10-year Commercial Limited Warranty.
- B. Extended Warranty: Provide extended warranty for a period of 25 years after "Notice of Completion". Covering the following:
 - 1. Edge raveling and zippering.
 - 2. Wear exceeding 10 percent of face yarn weight.
 - 3. Delamination.
 - 4. Backing deterioration

PART 2 PRODUCTS

2.01 REGULATORY REQUIREMENTS

- A. All products used for flooring installation shall comply with flammability and smoke classifications for various locations of installation. Comply with applicable requirements of California Building Code (CBC) Chapter 8.
- B. Provide glue-down installation conforming to CBC Section 11B-302.2.
 - 1. Carpet shall be securely attached and shall have a firm cushion. pad, or backing or no cushion or pad.
 - a. Carpet shall have level loop, textured loop, level cut or level cut/uncut pile texture.
 - b. Pile height shall be 1/2 inch maximum.
 - 2. Exposed edges shall be fastened to floor surfaces and shall have trim on the entire length.
 - a. Carpet edges shall comply with CBC Section 11B-303.
- C. Comply with Cal Green Building Standards: All installed carpeting shall be low VOC emissions listed. Certified as Low Emission by one of the following:
 - 1. Carpet and Rug Institute's Green Label Plus Program. CalGreen 5.504.4.4.1
 - 2. Compliant with the VOC emission limits and testing requirements specified in the California Department of Public Health's "Standard Method for the Testing and Evaluation Chambers", Version 1.1, February 2010 or Specification 01350. CalGreen 5.504.4.4.2.
 - 3. NSF/ANSI 140 at Gold level or higher. CalGreen 5.504.4.4.3
 - 4. SCS Floorscore; www.scs-certified.com. CalGreen 5.504.4.4.4.
 - 5. Compliant with the Collaborative for High Performance Schools California (CA-CHPS) Criteria Interpretation for EQ 7.0 and EQ 7.1 (formerly EQ 2.2) dated July 2012 and listed in the CHPS High Performance Product Database; www.chps.net/manual/lem_table.htm. CalGreen 5.504.4.4.5.

2.02 MANUFACTURERS

- A. Carpet:
 - 1. Basis of Design Product: LLCSD District Standards as manufactured by Patcraft or approved equal.
 - 2. Patcraft: patcraft.com

2.03 CARPET

- A. Carpet, LLCSD High Performance Loop Pile Broadloom: Tufted, nylon.
 - 1. 100% first quality, bulk continuous filament (BCF) Type 6,6 nylon offering a construction and performance standards testing program by fiber producer. Hollow filament fiber shape for optimum soil hiding capability. Modification Ratio <1.5. Fiber identification to AATCC 20.

2. Critical Radiant Flux: Minimum of 0.45 watts/sq cm, when tested in accordance with ASTM E648 or NFPA 253.
3. Smoke Density: ASTM E662 Rating to be less than 450 Dm in flaming mode (or to State Code).
4. Surface Flammability Ignition: Pass ASTM D2859 (the "pill test").
5. VOC Content: Provide CRI (GLP) certified product; in lieu of labeling, independent test report showing compliance is acceptable.
6. Color: As indicated on Drawings.
7. Dye Method: Solution Dyed Antron Lumena
8. Roll Width: 6 ft.
9. Static Control Fiber, AATCC Test Method 134: Permanent control system (i.e. antistatic filaments) and without chemical treatment to limit static build-up in accordance with American Association of Textile Chemists and Colorists at 20 percent relative humidity and to 70 degrees.
10. Maximum Electrostatic Charge: 3.5 Kv. at 20 percent relative humidity (RH).
11. Gage: 1/12 inch.
12. Stitches: 11.0 per inch.
13. Face Weight: 14 oz/sq yd, ASTM D5848.
14. Light Fastness: AATCC Test Method 16, AATCC 16 option 3 to 160 AFU; minimum rating of 4 using AATCC Gray Scale for Color Change.
15. Colorfastness to Crocking, AATCC 165: Minimum rating of 4 both wet and dry using the AATCC Chromatic Transference Scale.
16. Stain Resistance: AATCC 171 (HWE) for 2 cleanings to simulate removal of topical treatments by hot water extraction, followed by AATCC 175 Stain Resistance test; minimum rating of 8 using AATCC Red 40 Stain Scale.
17. Soil Resistance: XTERA® Soil resistant treatment heat applied by mill.
18. Moisture Resistance: Must pass AATCC 205, Carpet: Liquid Penetration by Spillage.
19. Appearance Retention: Texture Appearance Retention Rating (TARR) of 3.5 for Severe Traffic. ASTM D5252, Hexapod Tumble Drum Test, 12,000 cycles with 8.4 lb commercial heavy ball, and ASTM D7330 Assessment of Surface Change.
20. Primary Backing: Tufted - 100% woven or non-woven.
 - a. Material: Synthetic.
21. Laminate:
 - a. Resistance to Delamination, ASTM D3936: 3.5 lbs/inch, minimum.
 - b. Tuft Bind, ASTM D1335: 3 lbs-force minimum cut pile, 8 lbs-force minimum loop pile tile.
22. Secondary Backing:
 - a. Material: High Density Polyethylene (LDPE) with 24 Lb Polyurethane Cushion. No PVC.
23. Total Weight: 81 oz/sq yd.

24. Total Thickness: 0.320 inch.
25. Recycling:
 - a. New Carpet:
 - 1) Carpet must be eligible for recycling by the supplying mill or fiber producer to an existing operational third party certified recycling center;
 - 2) Submit program parameters.
 - 3) Landfills are not an option.
 - b. Used Carpet:
 - 1) Remove carpet and recycle regardless of manufacturer, fiber type or construction.
 - 2) Reclamation Agency and Carpet Remover shall certify in writing that Used Carpet was removed and recycled.
 - 3) Landfills are not an option.

2.04 CUSHION

- A. Cushion: Double bond rubber carpet pad.
 1. VOC Content: Comply with Section 01 61 16 and CalGreen 5.504.4.4.1.
 2. Nominal Thickness: 0.100 inch.
 3. Roll Width: 72 inches.
 4. Density: 32 lb/cu ft.

2.05 CARPET TILE (ENTRY OR "WALK-OFF" MAT)

- A. Carpet shall have level loop, textured loop, level cut or level cut/uncut pile texture and maximum pile height of 1/2 inch.
 1. Provide Carpet Tile meeting Green Label Plus Approved Product List tested in accordance with "California High Performance Schools Certification Procedures".
- B. Entry mat tile shall comply with the following minimum properties:
 1. Construction: Molded, reinforced needle punch textile.
 2. Size: 24 inches by 24 inches.
 3. Texture/Pattern: Rubber reinforced geometric textured pattern loop.
 4. Pile Height: 0.250 inch
 5. Fiber System: 100 percent premium polypropylene
 6. Dye Method: Solution dyed.
 7. Backing: Non-thermoplastic cleated SBR.
- C. Color: Scheduled on Drawings, or as selected from manufacturer's standards.
- D. Adhesive:
 1. As recommended by carpet tile manufacturer, type based upon application and intended use.
 2. Provide adhesives meeting Green Label Plus Approved Product List tested in accordance with "California High Performance Schools Certification Procedures".

2.06 ACCESSORIES

- A. Sub-Floor Filler: White premix latex; Type recommended by carpet manufacturer.
- B. Resilient Base: See Section 09 65 00 - Resilient Flooring.
- C. Moldings and Edge Strips: Vinyl, color as selected.
- D. Integrated Matting System:
 - 1. District requires integrated mats to be installed where carpet interfaces with an exterior door.
 - 2. Reducers shall only be used in the threshold area.
 - 3. A clear silicone bead shall be applied to the edge of the carpet material where matting is installed.
- E. Adhesives:
 - 1. Compatible with materials being adhered; maximum VOC content as specified in Section 01 61 16.
- F. Carpet Adhesive: Recommended by carpet manufacturer; releasable type.
 - 1. Peel and stick or a low VOC adhesive application is required

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that subfloor surfaces are smooth and flat within the tolerances specified for that type of work and are ready to receive carpet.
 - 1. Maximum variation of 1/4-inch in 10 ft
- B. Verify that subfloor surfaces are dust-free and free of substances that could impair bonding of adhesives to subfloor surfaces.
- C. Cementitious Subfloor Surfaces: Verify that substrates are ready for flooring installation by testing for moisture and alkalinity (pH).
 - 1. Test in accordance with Section 09 05 61.
 - 2. Obtain instructions if test results are not within limits recommended by flooring material manufacturer and adhesive materials manufacturer.
- D. Carpet Verification: Verify carpet match before cutting to ensure minimal variation between dye lots.
- E. Verify that required floor-mounted utilities are in correct location.

3.02 PREPARATION

- A. Prepare floor substrates for installation of flooring in accordance with Section 09 05 61.

3.03 INSTALLATION - GENERAL

- A. Starting installation constitutes acceptance of subfloor conditions.
- B. Install carpet and cushion in accordance with manufacturer's instructions and CRI 104 (Commercial).

- C. Verify carpet match before cutting to ensure minimal variation between dye lots.
- D. Lay out carpet and locate seams in accordance with shop drawings.
 - 1. Locate seams in area of least traffic, out of areas of pivoting traffic, and parallel to main traffic.
 - a. Fit seams straight, not crowded or peaked, free of gaps. Avoid seams in front of doors or other high traffic areas. Join seams by hot adhesive tape method. Form seams straight, not overlapped or peaked, and free of gaps.
 - 2. Do not locate seams perpendicular through door openings.
 - 3. Align run of pile in same direction as anticipated traffic and in same direction on adjacent pieces.
 - 4. Locate change of color or pattern between rooms under door centerline.
 - 5. Provide monolithic color, pattern, and texture match within any one area.
- E. Install carpet tight and flat on subfloor, well fastened at edges, with a uniform appearance.
 - 1. Join seams by hot adhesive tape method. Form seams straight, not overlapped or peaked, and free of gaps.

3.04 DIRECT-GLUED CARPET

- A. Double cut carpet seams, with accurate pattern match. Make cuts straight, true, and unfrayed. Apply seam adhesive to cut edges of woven carpet immediately.
- B. Apply contact adhesive to floor uniformly at rate recommended by manufacturer. After sufficient open time, press carpet into adhesive.
- C. Apply seam adhesive to the base of the edge glued down. Lay adjoining piece with seam straight, not overlapped or peaked, and free of gaps.
 - 1. Butt and glue edges tightly and roll seams to ensure complete bond.
- D. Roll with appropriate roller for complete contact of adhesive to carpet backing.
- E. Trim carpet neatly at walls and around interruptions.
 - 1. Edges: Run carpet under open bottom items and all cabinets and install tight to walls. Neatly trim and secure edge of carpet adjacent to door jambs where no base occurs.
- F. Complete installation of edge strips, concealing exposed edges. Bind cut edges where not concealed by edge strips.
- G. Carpet Finishing: Brush all seams and trim protruding pile tufts level. Remove excess adhesive on the carpet surface and thoroughly vacuum entire area. Leave room clean and ready for use.

3.05 TILE (WALK-OFF MAT) INSTALLATION

- A. Install carpet tile in accordance with manufacturer's instructions and CRI Carpet Installation Standard.
- B. Blend carpet from different cartons to ensure minimal variation in color match.
- C. Cut carpet tile clean. Fit carpet tight to intersection with vertical surfaces without gaps.
- D. Lay carpet tile in square pattern, with pile direction parallel to next unit, set parallel to building lines.

1. Locate change of color or pattern between rooms under door centerline.
- E. Locate change of color or pattern between rooms under door centerline.
- F. Fully adhere carpet tile to substrate.
- G. Trim carpet tile neatly at walls and around interruptions.
 1. Edges: Run carpet under open bottom items and all cabinets and install tight to walls. Neatly trim and secure edge of carpet adjacent to door jambs where no base occurs.
- H. Complete installation of edge strips, concealing exposed edges.
- I. Carpet Finishing: Brush all seams and trim protruding pile tufts level. Remove excess adhesive on the carpet surface and thoroughly vacuum entire area. Leave room clean and ready for use.

3.06 PROTECTION

- A. Cover carpet during construction period with reinforced kraft paper when construction traffic is required to cross carpeted areas.
- B. Remove and replace damaged or improperly installed carpet.

3.07 CLEANING

- A. Remove excess adhesive from floor and wall surfaces without damage.
- B. Clean and vacuum carpet surfaces.
 1. Vacuum and remove all stains from carpet to satisfaction of District and in accordance with cleaning specified in Section 01 70 00 - Execution and Closeout Requirements.

END OF SECTION

SECTION 09 91 23
INTERIOR PAINTING

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Surface preparation.
- B. Field application of paints.
- C. Materials for back priming woodwork.
- D. Scope: Finish interior surfaces exposed to view, unless fully factory-finished and unless otherwise indicated.
 - 1. Both sides and edges of plywood backboards for electrical and telecom equipment before installing equipment.
 - 2. Mechanical and Electrical:
 - a. In finished areas, paint insulated and exposed pipes, conduit, boxes, insulated and exposed ducts, hangers, brackets, collars and supports, mechanical equipment, and electrical equipment, unless otherwise indicated.
 - b. In finished areas, paint shop-primed items.
 - c. Paint interior surfaces of air ducts that are visible through grilles and louvers with one coat of flat black paint to visible surfaces.
 - d. Paint dampers exposed behind louvers, grilles, and convactor and baseboard cabinets to match face panels.
- E. Do Not Paint or Finish the Following Items:
 - 1. Items factory-finished unless otherwise indicated; materials and products having factory-applied primers are not considered factory finished.
 - 2. Items indicated to receive other finishes.
 - 3. Items indicated to remain unfinished.
 - 4. Fire rating labels, equipment serial number and capacity labels, bar code labels, and operating parts of equipment.
 - 5. Floors, unless specifically indicated.
 - 6. Glass.
 - 7. Concealed pipes, ducts, and conduits.

1.02 RELATED REQUIREMENTS

- A. Section 01 61 16 - Volatile Organic Compound (VOC) Content Restrictions.
- B. ~~Section 09 91 13 - Exterior Painting.~~

1.03 REFERENCE STANDARDS

- A. ASTM D4442 - Standard Test Methods for Direct Moisture Content Measurement of Wood and Wood-Based Materials; 2016.

- B. MPI (APSM) - Master Painters Institute Architectural Painting Specification Manual; Current Edition.
- C. SSPC-SP 1 - Solvent Cleaning; 2015, with Editorial Revision (2016).
- D. SSPC-SP 6 - Commercial Blast Cleaning; 2007.

1.04 SUBMITTALS

- A. See Section 01 30 00 - Administrative Requirements, for submittal procedures.
- B. Product Data: Provide complete list of products to be used, with the following information for each:
 - 1. Manufacturer's name, product name and/or catalog number, and general product category (e.g. "alkyd enamel").
 - 2. MPI product number (e.g. MPI #47).
 - 3. Cross-reference to specified paint system(s) product is to be used in; include description of each system.
 - 4. Manufacturer's installation instructions.
 - 5. If proposal of substitutions is allowed under submittal procedures, explanation of substitutions proposed.
- C. Samples: Submit three paper "draw down" samples, 8-1/2 by 11 inches in size, illustrating range of colors available for each finishing product specified.
 - 1. Where sheen is specified, submit samples in only that sheen.
 - 2. Where sheen is not specified, discuss sheen options with Architect before preparing samples, to eliminate sheens definitely not required.
 - 3. Allow 30 days for approval process, after receipt of complete samples by Architect.
- D. Samples: Submit two painted samples, illustrating selected colors and textures for each color and system selected with specified coats cascaded. Submit on aluminum sheet, 8 x 10 inch in size.
- E. Certification: By manufacturer that paints and finishes comply with VOC limits specified.
- F. Maintenance Data: Submit data including finish schedule showing where each product/color/finish was used, product technical data sheets, material safety data sheets (MSDS), care and cleaning instructions, touch-up procedures, repair of painted and finished surfaces, and color samples of each color and finish used.
- G. Maintenance Materials: Furnish the following for District's use in maintenance of project.
 - 1. See Section 01 60 00 - Product Requirements, for additional provisions.
 - 2. Extra Paint and Finish Materials: 1 gallon of each color; from the same product run, store where directed.
 - 3. Label each container with color in addition to the manufacturer's label.

1.05 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Company specializing in manufacturing the products specified, with minimum three years documented experience.

- B. Applicator Qualifications: Company specializing in performing the type of work specified with minimum three years experience and approved by manufacturer.

1.06 DELIVERY, STORAGE, AND HANDLING

- A. Deliver products to site in sealed and labeled containers; inspect to verify acceptability.
- B. Container Label: Include manufacturer's name, type of paint, brand name, lot number, brand code, coverage, surface preparation, drying time, cleanup requirements, color designation, and instructions for mixing and reducing.
- C. Paint Materials: Store at minimum ambient temperature of 45 degrees F and a maximum of 90 degrees F, in ventilated area, and as required by manufacturer's instructions.

1.07 FIELD CONDITIONS

- A. Do not apply materials when surface and ambient temperatures are outside the temperature ranges required by the paint product manufacturer.
- B. Follow manufacturer's recommended procedures for producing best results, including testing of substrates, moisture in substrates, and humidity and temperature limitations.
- C. Do not apply materials when relative humidity exceeds 85 percent; at temperatures less than 5 degrees F above the dew point; or to damp or wet surfaces.
- D. Minimum Application Temperatures for Paints: 50 degrees F for interiors unless required otherwise by manufacturer's instructions.
- E. Provide lighting level of 80 ft candles measured mid-height at substrate surface.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. Provide paints and finishes from the same manufacturer to the greatest extent possible.
 - 1. In the event that a single manufacturer cannot provide specified products, minor exceptions will be permitted provided approval by Architect is obtained using the specified procedures for substitutions.
 - 2. Substitution of other products by the same manufacturer is preferred over substitution of products by a different manufacturer.
- B. Paints:
 - 1. Dunn-Edwards Corporation: www.dunnedwards.com,
 - a. Local representative Wanda Barragan (909) 261-1289.
 - 2. Sherwin-Williams Company: www.sherwin-williams.com/#sle.
 - a. Local representative John Dumesnil (619) 665-9341.
- C. Primer Sealers: Same manufacturer as topcoats.

2.02 PAINTS AND FINISHES - GENERAL

- A. Paints and Finishes: Ready mixed, unless intended to be a field-catalyzed paint.
 - 1. Provide paints and finishes of a soft paste consistency, capable of being readily and uniformly dispersed to a homogeneous coating, with good flow and brushing properties, and capable of drying or curing free of streaks or sags.
 - 2. Provide materials that are compatible with one another and the substrates indicated under conditions of service and application, as demonstrated by manufacturer based on testing and field experience.
 - 3. For opaque finishes, tint each coat including primer coat and intermediate coats, one-half shade lighter than succeeding coat, with final finish coat as base color.
 - 4. Supply each paint material in quantity required to complete entire project's work from a single production run.
 - 5. Do not reduce, thin, or dilute paint or finishes or add materials unless such procedure is specifically described in manufacturer's product instructions.
- B. Volatile Organic Compound (VOC) Content: Comply with Section 01 61 16.
 - 1. Regulatory Requirements: Conform to California Air Resources Board (CARB), and South Coast Air Quality Management District (SCAQMD) and other applicable local air quality regulations for products and application.
- C. Flammability: Comply with applicable code for surface burning characteristics.
- D. Sheens: Provide the sheens specified; where sheen is not specified, sheen will be selected later by Architect from the manufacturer's full line.
- E. Colors: As indicated on drawings.
 - 1. Extend colors to surface edges; colors may change at any edge as directed by Architect.
 - 2. In finished areas, finish pipes, ducts, conduit, and equipment the same color as the wall/ceiling they are mounted on/under.

2.03 PAINT SYSTEMS - INTERIOR

- A. Paint I-OP - Interior Surfaces to be Painted, Unless Otherwise Indicated: Including gypsum board and shop primed steel.
 - 1. Two top coats and one coat primer.
 - 2. Top Coat(s): Interior Latex.
 - a. Products:
 - 1) Behr Marquee Interior Eggshell Enamel [No.2450]. (MPI #52)
 - 2) Dunn-Edwards Suprema, Interior Eggshell Paint, SPMA30. (MPI #52)
 - 3) PPG Paints Ultra-Hide 150 Interior Low Sheen Paint, 1410-XXXXV, Eggshell. (MPI #44)
 - 4) Sherwin-Williams Harmony Interior Acrylic Latex, Eg-Shel. (MPI #44)
 - 5) Vista Paint Vista Carefree, Carefree Eggshell Finish, 8300. (MPI #52)
 - 6) Substitutions: Section 01 60 00 - Product Requirements.
 - 3. Top Coat Sheen:
 - a. Eggshell: MPI gloss level 3; use this sheen at all locations.

- b. Semi-Gloss: MPI gloss level 5; use this sheen at all locations.
 - 4. Primer: As recommended by top coat manufacturer for specific substrate.
- B. Paint I-OP-MD-DT - Medium Duty Door/Trim: For surfaces subject to frequent contact by occupants, including metals:
 - 1. Medium duty applications include doors and door frames.
 - 2. Two top coats and one coat primer.
 - 3. Top Coat(s): Interior Light Industrial Coating, Water Based; MPI #151, 153 or 154.
 - a. Products:
 - 1) Behr Interior/Exterior Direct-To-Metal Paint Semi-Gloss, 3200. (MPI #153)
 - 2) Dunn-Edwards Evershield Exterior/Interior Semi-Gloss, EVSH50-2. (MPI #153)
 - 3) Sherwin-Williams Pro Industrial Acrylic Coating, Semi-Gloss. (MPI #153)
 - 4) Vista Paint Vista Carefree Semi Gloss Finish, 8400. (MPI #153)
 - 5) Substitutions: Section 01 60 00 - Product Requirements.
- C. Paint I-OP-MD-WC - Medium Duty Vertical and Overhead: Including gypsum board, concrete, uncoated steel, shop primed steel, galvanized steel, and aluminum.
 - 1. Two top coats and one coat primer.
 - 2. Top Coat(s): Interior Light Industrial Coating, Water Based; MPI #151, 153, or 154.
 - a. Products:
 - 1) Behr Premium Interior/Exterior Direct-To-Metal Semi-Gloss [No. 3200]. (MPI #153)
 - 2) Sherwin-Williams Pro Industrial Acrylic Coating, Semi-Gloss. (MPI #153)
- D. Paint I-OP-DF - Dry Fall: Metals; exposed structure and overhead-mounted services in utilitarian spaces, including shop primed steel deck, structural steel, metal fabrications, galvanized ducts, galvanized conduit, and galvanized piping.
 - 1. Shop primer by others.
 - 2. One top coat.
 - 3. Top Coat: Latex Dry Fall.
 - a. Products:
 - 1) Behr Pro Dry fall, Flat, PR890, MPI #118.
 - 2) Dunn-Edwards, Aqua fall, Flat, W6079, MPI #118.
 - 3) Dunn-Edwards, Aquafall, Low Sheen (Gloss Level 3), W6078.
 - 4) Sherwin-Williams Waterborne Acrylic Dryfall, Flat. (MPI #118)
 - 5) Vista Paint, W/B Dry Fall - Flat, DF12, MPI #118.
 - 6) Substitutions: Section 01 60 00 - Product Requirements.
- E. Paint MI-OP-3L - Ferrous Metals, Unprimed, Latex, 3 Coat:
 - 1. One coat of latex primer.
- F. Paint MI-OP-2L - Ferrous Metals, Primed, Latex, 2 Coat:
 - 1. Touch-up with latex primer.
- G. Paint Mgl-OP-3L - Galvanized Metals, Latex, 3 Coat:
 - 1. One coat galvanize primer.
- H. Paint Mal-OP-3L - Aluminum, Unprimed, Latex, 3 Coat:

1. One coat etching primer.
- I. Paint GI-OP-3A - Gypsum Board/Plaster, Alkyd, 3 Coat:
 1. One coat of alkyd primer sealer.
 2. Semi-gloss: Two coats of alkyd enamel; Behr Paint, 3900 Series Interior/Exterior Alkyd Semi-Gloss Enamel.
- J. Paint GI-OP-3LA-VOC - Gypsum Board/Plaster, Latex-Acrylic, 3 Coat, Zero VOC:
 1. One coat of latex-acrylic primer sealer.
 2. Semi-gloss: Two coats of latex-acrylic; Behr Paint, 3000 Series Premium Plus Zero VOC Interior Semi-Gloss.
- K. Paint GI-OP-3LA-LV - Gypsum Board/Plaster, Latex-Acrylic, 3 Coat, Low VOC:
 1. One coat of latex-acrylic primer sealer.
 2. Gloss: Two coats of latex-acrylic enamel; Behr Paint, 2-8000 Series Premium Plus Interior/Exterior High Gloss Enamel.
- L. Paint GI-OP-3LA - Gypsum Board/Plaster, Latex-Acrylic, 3 Coat:
 1. One coat of alkyd primer sealer.
 2. Flat (ceilings): Two coats of latex enamel-acrylic; Behr Paint, 558 Interior Ceiling Flat.

2.04 ACCESSORY MATERIALS

- A. Accessory Materials: Provide primers, sealers, cleaning agents, cleaning cloths, sanding materials, and clean-up materials as required for final completion of painted surfaces.
- B. Patching Material: Latex filler.
- C. Fastener Head Cover Material: Latex filler.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Do not begin application of paints and finishes until substrates have been properly prepared.
- B. Verify that surfaces are ready to receive work as instructed by the product manufacturer.
- C. Examine surfaces scheduled to be finished prior to commencement of work. Report any condition that may potentially effect proper application.
- D. Test shop-applied primer for compatibility with subsequent cover materials.
- E. Measure moisture content of surfaces using an electronic moisture meter. Do not apply finishes unless moisture content of surfaces are below the following maximums:
 1. Gypsum Wallboard: 12 percent.
 2. Masonry, Concrete, and Concrete Masonry Units: 12 percent.
 3. Interior Wood: 15 percent, measured in accordance with ASTM D4442.

3.02 PREPARATION

- A. Clean surfaces thoroughly and correct defects prior to application.

- B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.
- C. Remove or mask surface appurtenances, including electrical plates, hardware, light fixture trim, escutcheons, and fittings, prior to preparing surfaces or finishing.
- D. Seal surfaces that might cause bleed through or staining of topcoat.
- E. Concrete:
- F. Gypsum Board: Fill minor defects with filler compound. Spot prime defects after repair.
- G. Aluminum: Remove surface contamination and oils and wash with solvent according to SSPC-SP 1.
- H. Galvanized Surfaces:
- I. Ferrous Metal:
 - 1. Solvent clean according to SSPC-SP 1.
 - 2. Shop-Primed Surfaces: Sand and scrape to remove loose primer and rust. Feather edges to make touch-up patches inconspicuous. Clean surfaces with solvent. Prime bare steel surfaces. Re-prime entire shop-primed item.
 - 3. Remove rust, loose mill scale, and other foreign substances using methods recommended in writing by paint manufacturer and blast cleaning according to SSPC-SP 6 "Commercial Blast Cleaning". Protect from corrosion until coated.
- J. Wood Surfaces to Receive Opaque Finish: Wipe off dust and grit prior to priming. Seal knots, pitch streaks, and sappy sections with sealer. Fill nail holes and cracks after primer has dried; sand between coats. Back prime concealed surfaces before installation.
- K. Wood Doors to be Field-Finished: Seal wood door top and bottom edge surfaces with tinted primer.
- L. Metal Doors to be Painted: Prime metal door top and bottom edge surfaces.

3.03 APPLICATION

- A. Remove unfinished louvers, grilles, covers, and access panels on mechanical and electrical components and paint separately.
- B. Apply products in accordance with manufacturer's written instructions.
- C. Do not apply finishes to surfaces that are not dry. Allow applied coats to dry before next coat is applied.
- D. Apply each coat to uniform appearance in thicknesses specified by manufacturer.
- E. Sand wood and metal surfaces lightly between coats to achieve required finish.
- F. Vacuum clean surfaces of loose particles. Use tack cloth to remove dust and particles just prior to applying next coat.
- G. Reinstall electrical cover plates, hardware, light fixture trim, escutcheons, and fittings removed prior to finishing.

3.04 FIELD QUALITY CONTROL

- A. See Section 01 40 00 - Quality Requirements, for general requirements for field inspection.

3.05 CLEANING

- A. Collect waste material that could constitute a fire hazard, place in closed metal containers, and remove daily from site.

3.06 PROTECTION

- A. Protect finishes until completion of project.
- B. Touch-up damaged finishes after Substantial Completion.

END OF SECTION

Little Lake City School District

TECHNICAL SPECIFICATION

HAZARDOUS MATERIALS REMOVAL/IMPACT

STUDEBAKER ELEMENTARY SCHOOL
11800 HALCOURT AVENUE
NORWALK, CALIFORNIA 90650

Volume 1 of 1

EE Project No. 15-Z0187-0083

May 2015



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DIVISION 1
GENERAL REQUIREMENTS

SECTION 01010
SCOPE OF WORK

1.1 GENERAL:

The work to be performed by the contractor comprises:

PROJECT: HAZARDOUS MATERIAL ABATEMENT AND COMPONENT REMOVAL IN CONJUNCTION WITH THE DOOR REPLACEMENT PROJECT

OWNER: LITTLE LAKE CITY SCHOOL DISTRICT

1.2 THE SITE:

The work will be performed at the following site within the Little Lake City School District:

Site Location
Studebaker Elementary School 11800 Halcourt Avenue, Norwalk, California 90650

The exact scope and limits of work are the sole responsibility of the Abatement Contractor, he/she shall determine and verify all conditions, quantities, and situations adjoining his/her work and existing items. It is the responsibility of the Abatement Contractor and or prime trade to use trained personnel, proper personal protection and monitoring, wet methods, and compliant disposal of those materials that might be impacted during this project.

1.3 POTENTIAL ASBESTOS HAZARD

- A. Abatement Contractor is warned that unprotected exposure to asbestos fibers has been determined to significantly increase risk of incurring the following diseases: asbestosis, lung cancer, mesothelioma, and certain gastrointestinal cancers. Care must be taken to avoid releasing or causing to be released, asbestos fibers into the atmosphere. Within Code of Federal Regulations, Title 29, Section 1926.1101 (abbreviated as 29 CFR 1926.1101), the Occupational Safety and Health Administration (OSHA) has set standards for permissible exposure to airborne concentrations of asbestos fibers, methods of compliance, personal protective equipment, and other methods which must be utilized when working with, or in proximity to asbestos. In executing the contract, the Abatement Contractor certifies that he shall comply with all parts of this regulation, as well as any more stringent requirements as specified in this specification.
- B. Abatement Contractor shall presume that detectable levels of asbestos are present in all existing installed surfaces, except and unless objective information to the contrary is provided by the Owner, Owner's Representative, or Owner's Consultant. The Abatement Contractor shall be responsible for conformance with all applicable Cal/Occupational Safety and Health Administration (Cal/OSHA) Worker Protection and Cal/Environmental Protection Agency (EPA) Environmental Protection requirements pertaining to asbestos as applicable to the Abatement Contractor's work.

1.4 LEAD-BASED PAINT HAZARD

A. Lead has been used as a key ingredient in paint for many years. Cal/OSHA requires all employers that work with materials that may be toxic, including lead-containing paint, to provide hazard communication and training to their employees. All contractors shall ensure that they are in compliance with all Cal/OSHA and applicable regulations. Additionally, the contractors shall observe the following work practices:

- Absolutely no dry sanding of painted surfaces.
- When surface cleaning is necessary for repainting, surfaces shall be wet-cleaned or HEPA vacuumed.
- Voids or ridges in painted surfaces shall be filled or "feathered" as necessary with compatible, non-lead containing products.
- Paint Film Stabilization is required where loose and flaky paint exists prior to component removal and/or demolition. A top coat sealer shall be applied to prevent further lead-based paint (LBP) flaking during removal.
- All cleanup of debris shall include wet methods or use of a high efficiency particulate air (HEPA) filtered vacuum.
- All paint debris and disposable equipment/materials from surface preparation, demolition or other paint disturbance, shall be contained and removed from the site.

1.5 SCOPE OF WORK:

Contractor will follow the applicable abatement procedures listed below for that material. Where conflict among requirements or with these specifications exists, the more stringent requirements shall apply.

Hazardous Materials Removal: This Contract covers the furnishings of all labor and materials and proper disposal required for impacting of hazardous materials from the following areas:

A. Asbestos-Containing Materials Abatement Procedures:

1. Remove and dispose of asbestos-containing materials (ACM) from areas designated by the various prime trades and/or Construction Manager as required for construction of the Project. Some work may require only partial removal of the materials listed.
2. Where carpet exists and is glued to asbestos-containing or asbestos-contaminated materials, such carpet shall be removed as asbestos-contaminated materials and be disposed of as such, unless carpet can be removed, in total, without attachment to such asbestos-containing or contaminated materials.
3. In areas where floor tile is to be removed as asbestos-containing or contaminated, AND where floor tile is suspected of going under cabinets, it is the responsibility of the contractor to demolish said cabinets in order to access the flooring and/or mastic, unless those cabinets are deemed to remain in place by the District.

4. Clearance sampling will be accomplished via Phase Contrast Microscopy (PCM) and/or Transmission Electron Microscopy (TEM), whichever is appropriate, in accordance with AHERA Regulations (40 CFR 763). See Sections 2071 and 2080 for clearance requirements.
5. Contractor shall use every effort to limit the number of multiple containment areas by combining as many rooms/areas as possible into one containment.

Asbestos Containing Materials 100 Building						
Item No.	Material Description	Type of work	Location	Quantity	ACM content	Applicable Haz. Mat'l section
01	Floor tile and mastic	Remove as indicated in plans	Rooms 101, 102 (under carpet)	800 Square Feet	2-5% Chrysotile	02075 HM 02075A HM
02	Fire-rated door	Remove as indicated in plans	Heater room	1 Door	Assumed	02053 HM

Asbestos Containing Materials 200 Building						
Item No.	Material Description	Type of work	Location	Quantity	ACM content	Applicable Haz. Mat'l section
03	Floor tile and mastic	Remove as indicated in plans	Rooms 201, 202, 203, 204 (under carpet)	3,700 Square Feet	2-5% Chrysotile	02075 HM 02075A HM

Asbestos Containing Materials 300 Building						
Item No.	Material Description	Type of work	Location	Quantity	ACM content	Applicable Haz. Mat'l section
04	Floor tile and mastic	Remove as indicated in plans	Rooms 301, 302, 303, 304 (under carpet)	3,600 Square Feet	2-5% Chrysotile	02075 HM 02075A HM

Asbestos Containing Materials 400 Building						
Item No.	Material Description	Type of work	Location	Quantity	ACM content	Applicable Haz. Mat'l section
05	Floor tile and mastic	Remove as indicated in plans	Rooms 401, 403, 404 (under carpet)	2,000 Square Feet	2-5% Chrysotile	02075 HM 02075A HM

Asbestos Containing Materials 500 Building						
Item No.	Material Description	Type of work	Location	Quantity	ACM content	Applicable Haz. Mat'l section
06	Floor tile and mastic	Remove as indicated in plans	Rooms 501, 502, 503, 504 (under carpet)	3,600 Square Feet	2-5% Chrysotile	02075 HM 02075A HM
07	Fire-rated door	Remove as indicated in plans	Room 500	1 Door	Assumed	02053 HM

Asbestos Containing Materials 600 Building						
Item No.	Material Description	Type of work	Location	Quantity	ACM content	Applicable Haz. Mat'l section
08	Floor tile and mastic	Remove as indicated in plans	Rooms 601, 602, 603, 604 (under carpet)	3,600 Square Feet	5% Chrysotile	02075 HM 02075A HM

Asbestos Containing Materials Adminstration Building						
Item No.	Material Description	Type of work	Location	Quantity	ACM content	Applicable Haz. Mat'l section
09	9"x 9" floor tile and mastic	Remove as indicated in plans	Lounge, reception and health office (under carpet or 12" tile)	1,000 Square Feet	5% Chrysotile	02075 HM 02075A HM
10	Fire-rated door	Remove as indicated in plans	Mechanical room	1 Door	Assumed	02053 HM

END OF ASBESTOS SCOPE

B. Lead Abatement Procedures:

1. It is the responsibility of all contractors to use trained and certified personnel in accordance with California Department of Public Health (CDPH) and the Environmental Protection Agency's (EPA) Renovation, Repair, and Painting (RRP) regulations, and use proper personal protection and monitoring, wet methods, and proper disposal of materials that might be impacted during this project.
2. Paint Film Stabilization is required where loose and flaky paint exists prior to component removal. A top coat sealer shall be applied to prevent further Lead-Based Paint (LBP) flaking during removal.
3. For all surfaces scheduled for repainting, paint film stabilization will be required. Loose and flaky paint should be scraped and a top-coat compatible primer should be applied over intact areas for further surface preparation/painting by other trades
4. The contractor shall be responsible for all testing required for the proper disposal of all lead-based paint and lead-containing waste materials. This will require testing using waste stream analysis by the STLC, TTLC, and TCLP methods successively, if necessary, to determine non-regulatory limits for disposal. Contractor shall ensure that the attending consultant monitors and is aware (in writing) of each specific material sampling for waste stream analysis. **This information must be provided to the consultant prior to the material being removed from the site for testing.** Materials shall not be removed from the site until such testing and its results are provided to the consultant.

Lead-Based Paint 100 Building						
Item No.	Material Description	Type of work	Location	Quantity	Lead content Mg/cm ²	Applicable Haz. Mat'l section
11	Perimeter wood door transom (exterior side)	Component removal/impact or surface preparation for repainting as indicated in plans	Rooms 101 and 102	32 Square Feet	1.5	02093 HM 02095 HM

Lead-Based Paint 200 Building						
Item No.	Material Description	Type of work	Location	Quantity	Lead content Mg/cm ²	Applicable Haz. Mat'l section
12	Perimeter wood door transom (exterior side)	Component removal/impact or surface preparation for repainting as indicated in plans	Rooms 201, 202, 203, 204	64 Square Feet	1.1	02093 HM 02095 HM

Lead-Based Paint 300 Building						
Item No.	Material Description	Type of work	Location	Quantity	Lead content Mg/cm ²	Applicable Haz. Mat'l section
13	Perimeter wood door transom (exterior side)	Component removal/impact or surface preparation for repainting as indicated in plans	Rooms 301, 302, 303, 304	64 Square Feet	1.9	02093 HM 02095 HM

Lead-Based Paint 400 Building						
Item No.	Material Description	Type of work	Location	Quantity	Lead content Mg/cm ²	Applicable Haz. Mat'l section
14	Perimeter wood door transom (exterior side)	Component removal/impact or surface preparation for repainting as indicated in plans	Rooms 401, 402, 403, 404	64 Square Feet	1.7	02093 HM 02095 HM

Lead-Based Paint 500 Building						
Item No.	Material Description	Type of work	Location	Quantity	Lead content Mg/cm ²	Applicable Haz. Mat'l section
15	Perimeter wood door transom (exterior side)	Component removal/impact or surface preparation for repainting as indicated in plans	Rooms 501, 502, 503, 504	64 Square Feet	1.4	02093 HM 02095 HM

Lead-Based Paint 600 Building						
Item No.	Material Description	Type of work	Location	Quantity	Lead content Mg/cm ²	Applicable Haz. Mat'l section
16	Perimeter wood door frame (interior side)	Component removal/impact or surface preparation for repainting as indicated in plans	Room 600	1 Total	1.9	02093 HM 02095 HM
17	Wood baseboard	Component removal/impact or surface preparation for repainting as indicated in plans	Rooms 601, 602, 603, 604	480 Linear Feet	1	02093 HM 02095 HM

Lead-Based Paint Administration Building						
Item No.	Material Description	Type of work	Location	Quantity	Lead content Mg/cm²	Applicable Haz. Mat'l section
18	Perimeter wood door frame (interior side)	Component removal/impact or surface preparation for repainting as indicated in plans	Reception area	2 Total	1	02093 HM 02095 HM
19	Perimeter wood door transom (exterior side)	Component removal/impact or surface preparation for repainting as indicated in plans	Reception area, health office, lounge	32 Square Feet	2	02093 HM 02095 HM

END OF LEAD AND LBP SCOPE

END OF SCOPES OF WORK

1.6 WORK PLAN:

A preliminary work plan and proposed schedule shall be submitted with the bid form. Detailed work plan to be submitted within five (5) days of award of contract. At a minimum, the plan must include the following items:

- A. **Project schedule:** Include the proposed shifts, time, and manpower (include number of men per shift).

- B. **Detailed Work Plan:**
 - 1. **Protective Equipment:** Specifying protective equipment (respiratory and body protection)
 - 2. **Layout and Location on a drawing for each phase of work:**
 - a. **Decontamination:** Decontamination areas.
 - b. **Work Area:** Work area location, waste out area, location of equipment (staging area), location of negative air machines.
 - c. **Waste Bin:** Location of waste bins.
 - 3. **Document for each phase of work:**
 - a. **Containment:** Containment construction and methods.
 - b. **Disposal:** Disposal plan to include transporter and landfill name.
 - c. **Removal Methods:** Removal methods to prohibit visible emissions. Specific techniques/procedures for each material to be abated.
 - d. **Air monitoring firm/lab:** For conducting/analysis of personal samples.
 - e. **Levels of respiratory protection:** Provide levels of respiratory protection for each type of removal (e.g., floor tile, drywall).
 - f. **Equipment:** Equipment assigned to the project.
 - g. **Negative air machines:** Number of negative air machines in use at any one time for this project. Number of back-up negative air machines for this project. Contractor to provide copies to Owner of all required SCAQMD permits; "permit to operate" for asbestos related work and "permit to construct" for lead related work of all negative-air machines and HEPA vacuums to be used during the project.

- C. **Removal Methods:** In compliance with local, state, and federal requirements for asbestos removal.

- D. **Contacts:** Point of contact for questions.

- E. **Security/Fire Watch Plan:** Names, qualifications, etc. (if applicable).

1.8 SITE ACCESS

Site access is available during the days and hours as specified in bid and pre-construction meetings:

END OF SECTION

SECTION 01011HM

**ADDITONAL CONDITIONS FOR
HAZARDOUS MATERIALS WORK**

1.1 GENERAL:

- A. The work to be performed by the HAZARDOUS MATERIALS CONTRACTOR is defined in the methodologies of the Hazardous Materials Specifications as referenced, the General and Special Conditions, Division1/General Requirements, all special requirements, Section 01011 HM and specifically outlined in the Scope of Work.
- B. As further clarification, the following apply to this contract:
1. This Contract covers the furnishings of all labor and materials and compliant disposal of hazardous materials impacted as required by the scope of work. Some work may require only partial removal of the materials listed.
 2. It is the responsibility of the Abatement Contractor and/or prime trade to use trained personnel, proper personal protection and monitoring, wet methods and compliant disposal of those materials which might be impacted during this project.
 3. The District has made every attempt to identify all materials which will be impacted by this project. Except for those materials where objective information is provided to the contrary by the Owner, Owner's Representative, or Owner's Consultant, the Abatement Contractor shall presume that detectable levels of asbestos or lead are present in all remaining materials. If the Contractor is to impact materials, the contractor shall contact the Owner or Owner's representative prior to such impact.
 4. The Abatement Contractor shall be responsible for conformance with all applicable Cal/OSHA Worker Protection and Cal/EPA Environmental Protection and South Coast Air Quality Management District requirements pertaining to asbestos and/or lead paint as applicable to the Abatement Contractor's work.
 5. Hazardous Materials Contractor shall use California Department of Public Health (CDPH) and the Environmental Protection Agency's (EPA) Renovation, Repair, and Painting (RRP) trained and certified personnel for all lead-related work. In addition, Hazardous Material Contractor must also be certified as a firm in accordance with the EPA's RRP regulation.
 6. Contractor shall work on no more than one (1) building at any one time. For any one building, contractor shall make every effort to limit the number of multiple containment areas by combining as many room areas as possible into one containment. In the event that more than five (5) rooms will be combined into one containment, additional PCM samples shall be conducted for additional rooms.
 7. **Area clearance for lead:** For lead, all clearance wipes shall be randomly performed for those areas impacted through refinishing/repainting where scraping of LBP has occurred.
 8. Contractor will follow the applicable abatement procedures listed in this scope of work. Where conflict among requirements or within these specifications exists, the more stringent requirements shall apply.
 9. Provide an English-speaking on-site Competent Person who is able to understand and carry out the work set forth in the contract documents.
 10. Have fully staffed and capable crews working simultaneously on separate areas as necessary to maintain the project schedule. This is to include working multiple shifts, off-hours construction, and weekends at no additional cost to the owner.
 11. Be responsible for cooperation and coordination with school programs, Contractors of other Bid Packages, Testing Lab, local regulatory agencies, and Utility Companies.

12. Provide to District's Project Consultant satisfactory proof that the appropriate regulatory notification(s) has/have been issued and validation of a signed copy of the Contract with the District.
13. Supply power cords, distribution boxes, adapters, etc., as necessary to complete the work of this Bid package within the prescribed time frame and as such allows the District's Environmental Consultant to have access to five (5) free outlets per containment at any one time. Power will be supplied to locations within 25 feet of each containment/regulated area at no cost to the Environmental Consultant.
14. Provide task lighting as required to facilitate the work of the Bid Package in a timely manner according to the construction schedule. Provide sufficient task lighting to facilitate work of good quality. Provide sufficient task lighting for the Consultant during visual inspections and during clearance testing.
15. Provide sanitary facilities while on-site.
16. Normal hours of construction are from 7:00 am to 5:00 pm on a daily basis. Actual construction hours may be revised as project constraints may vary.
17. Provide and maintain sufficient hazardous waste containers to accommodate the hazardous waste generated on a daily basis. Full waste bin must be removed within two (2) days after bin is full. Waste and waste containers must be removed within two days (2) after the scheduled or agreed upon ending of project.
18. Maintain a clean work area. Perform a thorough clean-up of the area on a daily basis. All hazardous waste MUST be removed from the work area and stored in a locked waste bin.
19. Where areas are accessible from the exterior and cannot be secured because of containment restrictions, Hazardous Materials Contractor shall provide either 24-hour security or construct such a secured barrier while allowing Work Area accessibility to Emergency personnel, the Environmental Consultant, and the District at all times.
20. Hazardous Materials Contractor shall submit a detailed work plan and proposed schedule within five (5) days of award of contract. At a minimum, the plan must include the following items:
 - a. **Project schedule:** Include the proposed shifts, time, and manpower (include number of employees per shift).
 - b. **Detailed Work Plan:**
 - (1) Protective Equipment: Specifying protective equipment (respiratory and body protection).
 - (2) Layout and Location on a drawing for each phase of work:
 - (a) Decontamination: Decontamination areas.
 - (b) Work Area: work area location, waste out area, location of equipment (staging area), location of negative air machines.
 - (c) Waste Bin: Location of waste bins.
 - (3) Document for each phase of work:
 - (a) Containment: Containment construction and methods.
 - (b) Disposal: Disposal plan to include transporter and landfill name.
 - (c) Removal Methods: Removal methods to prohibit visible emissions. Specific techniques/procedures for each material to be removed.

- (d) Air monitoring firm/lab: For conducting analysis of personnel samples.
 - (e) Levels of Respiratory Protection: Provide levels of respiratory protection for each type of removal (e.g., floor tile, drywall, etc.).
 - (f) Contractor to provide copies to Owner of all required SCAQMD permits; “permit to operate” for asbestos related work and “permit to construct” for lead related work of all negative-air machines and HEPA vacuums to be used during the project.
- (4) Equipment: Equipment assigned to the project.
- (5) Negative Air Machines: Number of negative air machines, in use at any one time, for this phase. Number of back-up negative air machines for this phase. Contractor to provide
- c. **Specific Removal Methods**: In compliance with local, state and federal requirements for the abatement procedures.
 - d. **Contacts**: Point of contact for questions.
 - e. **Security/Fire Watch Plan**: Names, qualifications, etc. (if applicable)

SECTION 02053HM
FIRE DOOR REMOVAL (INTACT)

PART 1 - GENERAL

1.1 SCOPE:

This Specification is a supplement to Section 02071HM and covers the abatement of intact asbestos-containing fire doors from the following locations:

As described in Section 01010HM, Scope of Work.

If doors are **NOT** intact, abatement shall follow procedures as outlined in Section 02071HM.

1.2 DESCRIPTION OF WORK:

A. **General:** The Work specified herein shall be the removal of asbestos-containing material by persons knowledgeable, qualified, and trained in the removal, treatment, handling, and disposal of asbestos-containing material, and the subsequent cleaning of the affected environment, and who comply with Federal, State, and Local regulations which mandate work practices, and who are capable of performing the Work of this Contract.

B. **Contract Fulfillment:** The Contractor shall supply all labor, materials, equipment, services, insurance, and incidentals which are necessary or required to perform the Work in accordance with applicable governmental regulations and these Specifications.

C. **Related Work Specified Elsewhere:**

For related work see Section 01010HM, Scope of Work.

1.3 TERMINOLOGY:

The following terms used in these Specifications are defined in Section 02071HM.

1.4 APPLICABLE DOCUMENTS:

See Section 02071HM, Part 1.4, for Applicable Documents.

1.5 SUBMITTALS AND NOTICES:

See Section 02071HM, Part 1.5, for Submittals and Notices.

1.6 PERSONAL PROTECTION AND SAFETY:

Section 02071HM, Part 1.6, Personal Protection and Safety, shall be modified in the following particulars only.

A. Respiratory protection requirements:

1. All activities may be performed wearing a 1/2-face, negative-pressure respirator. If it becomes necessary to use powered air-purifying respirator (PAPR) protection, the respiratory protection requirements of Section 02071HM shall govern.

B. Worker protection procedures:

1. Each worker and authorized visitor shall, upon entering the job site: remove street clothes in the Change Room and put on a respirator and clean protective clothing before entering the Work area. Each person will don 2 protective clothing suits prior to entering the Work area.
2. All workers and authorized visitors shall, each time they leave the Work area; remove gross contamination from protective clothing, HEPA vacuum clothing, and remove the outer protective suit and place within a waste bag located within the work area. Each person will then proceed immediately to the shower room and remove the second inner, disposable suit. After wet wiping all exposed body and equipment surfaces, workers and/or visitors may then proceed through the exit to the uncontaminated area.

1.7 SUPERINTENDENT FOREMAN, CRAFTSMAN:

The Contractor shall have a job superintendent (and/or Competent person) present at all times while work on this Contract is in progress.

The Project Superintendent (and/or Competent person) shall be thoroughly familiar and experienced with asbestos removal and related work and shall be familiar with and shall enforce the use of all safety procedures and equipment. He or she shall be knowledgeable of all EPA, OSHA, and NIOSH requirements and guidelines.

In addition to the Superintendent (and/or Competent person), the Contractor shall furnish one or more foremen who are familiar and experienced with asbestos removal and its related work, safety procedures, and equipment. If the Superintendent is not present then the foremen shall be a Competent person.

- A. It shall be a requirement of this Contract that the superintendent and/or one or more of the Contractor's foremen be inside the Work area at all times while work is in progress.

- B. It is the intent of these Specifications that all phases of the Work shall be executed by skilled craftsmen experienced or receiving training by on-site experienced personnel in each respective trade.
- C. The Competent person on-site must be able to clearly communicate in a manner so that to the Owner's Consultant and Owner can clearly understand.

PART 2 - MATERIAL AND EQUIPMENT

2.1 MATERIALS:

See Section 02071HM, Part 2.1, for Materials.

2.2 TOOLS & EQUIPMENT

Section 02071HM, Part 2.2, Tools & Equipment, shall be modified in the following particulars only.

A. Pressure recorder:

- 1. No pressure recorder will be required while doors are intact. If doors are not intact all portions of Section 02071HM shall apply.

B. Equipment and Supplies: Supply the following items at a minimum

- 1. Airless sprayer
- 2. Amended water
- 3. Disposable clothing
- 4. Duct tape
- 5. Half-face respirator
- 6. HEPA filter vacuum
- 7. 6 mil polyethylene
- 8. Pipe cutter non-abrasive
- 9. Encapsulant

PART 3 - EXECUTION

3.1 PREPARATION:

Section 02071HM, Part 3.1, Preparation, shall be modified in the following particulars only.

A. Preparation:

Pre-clean work area by HEPA vacuuming. Post area and restrict access within 25 feet of the work area. Cover floor over an area at least 10 feet by 10 feet each side of the door opening with 6 mil polyethylene sheeting.

B. Decontamination Facilities:

1. The decontamination enclosure facility will be constructed of two totally enclosed chambers as follows:
 - a. An equipment room, constituting an air lock, with an access doorway to a designated area of the Work area and an access doorway to the shower area.
 - b. A washroom, constituting an air lock, with an access doorway to the equipment room and an access doorway to an uncontaminated area.
 - c. All floors of the decontamination chamber will be covered with two layers of six-mil plastic. Flooring plastic will extend up 12-inches along the decontamination walls. Flooring will be seamless in its application.
2. All decontamination systems or entry/exit system air locks will be constructed using Z-flap design incorporating 2 layers of 6-mil plastic with the flaps extending the full height and width of the entrance space.
3. Ensure that a water source within the shower room is available for wet wiping of all exposed extremities and respirator prior to exiting the decontamination facility. All protective gear will be removed and be disposed of in the equipment room prior to entering the shower room.

3.2 REMOVAL AND DISPOSAL OF ASBESTOS-CONTAINING FLOOR TILES AND/OR MASTIC:

Section 02071HM, Part 3.2, Asbestos Removal, shall be modified in the following particulars only.

A. Removal:

Remove doors, place within the area of polyethylene floor covering, spray with encapsulant, wrap and seal in 2 layers of 6 mil polyethylene sheeting, and label for proper disposal. Door knobs and accessories may be removed and disposed of separately to facilitate stacking of doors for disposal if the removal will not result in the release of internal ACM. Thoroughly spray openings with encapsulant. Door accessories to be salvaged shall be thoroughly cleaned by HEPA vacuuming and wet-wiping. Workers performing removal shall wear full body protective clothing and 1/2 face negative pressure respirators unless conditions require otherwise as specified in 3.3.A, below. If doors are damaged with insulation exposed, worker shall first spray encapsulant on exposed insulation, cover exposed area with 6-mil polyethylene and secure with duct tape prior to removing door from hinges. If debris is present, personnel shall HEPA vacuum and wet wipe the affected area.

3.3 CLEANUP AND AIR MONITORING:

Section 02071HM, Part 3.3, Cleanup and Air Monitoring, shall be modified in the following particulars only.

A. Air Monitoring:

If airborne fiber counts are found to exceed 0.1 f/cc during intact door removal, the Contractor shall prepare the work area for gross removal, as described in Section 02071HM, Asbestos Removal, and provide workers with (PAPR)(all as previously specified) prior to continuing the work.

B. Clean-Up and Disposal:

The work area shall be thoroughly cleaned by utilizing HEPA vacuuming and/or wet cleaning methods. Doors shall be disposed of as asbestos-containing waste as specified.

3.4 DISPOSAL OF ASBESTOS-CONTAINING MATERIALS AND ASBESTOS-CONTAMINATED WASTE:

Section 02071HM, Part 3.4, Asbestos-Containing Materials and Asbestos-Contaminated Waste, shall be modified in the following particulars only.

A. Asbestos Materials:

1. All materials shall be disposed of as hazardous asbestos containing materials.

3.5 REESTABLISHMENT OF OBJECTS AND SYSTEMS:

See Section 02071HM, Part 3.5 for Reestablishment of Objects and Systems.

END OF SECTION

SECTION 02071HM
ASBESTOS REMOVAL

PART 1 - GENERAL

1.1 SCOPE:

This Specification covers the abatement of friable asbestos-containing materials as described in Section 01010HM, Scope of Work.

1.2 DESCRIPTION OF WORK:

- A. **General:** The Work specified herein shall be the removal of asbestos-containing material by persons knowledgeable, qualified, and trained in the removal, treatment, handling, and disposal of asbestos-containing material, and the subsequent cleaning of the affected environment, and who comply with Federal, State, and Local regulations which mandate work practices, and who are capable of performing the Work of this Contract.
- B. The Contractor shall supply all labor, materials, equipment, services, insurance, and incidentals which are necessary or required to perform the Work in accordance with applicable governmental regulations and these Specifications.
- C. **Related Work Specified Elsewhere:** Refer to Sections:

Please refer to Section 01010HM, Scope of Work

1.3 TERMINOLOGY:

The following terms used in these Specifications are defined as listed below:

- A. **Abatement:** Procedures to control fiber release from asbestos-containing building materials. Includes securing the Work area, removing the material, cleaning the area, and disposal of the material.
- B. **Access Doorway:** A device to allow ingress and egress from one room to another while permitting minimal air movement between the rooms, typically constructed by placing two or three overlapping sheets of plastic over an existing or temporarily framed doorway, securing each along the top of the doorway, securing the vertical edge of one sheet along one vertical side of the doorway, and securing the vertical edge of the other sheet along the opposite vertical side of the doorway; or by using a rigid gasket door and HEPA filter vents.
- C. **ACCM:** Asbestos Containing Construction Material which contain one-tenth of a percent or greater, but not greater than one percent asbestos.

- D. **ACM:** Asbestos Containing Material is a material which contains greater than one percent asbestos.
- E. **Air Filtration Equipment:** A portable local filtration system equipped with HEPA filtration and capable of maintaining a constant, low velocity flow to filter and trap contamination out of the air within the work area and then circulate or exhaust the filtered air to uncontaminated areas. This equipment is also used to establish a reduced pressure within the work area.
- D. **Air Monitoring:** The process of measuring the fiber content of a specific volume of air in a stated period of time.
- F. **Air Lock:** A system for permitting ingress and egress with minimum air movement between a contaminated area and an uncontaminated area, consisting of dual or triple curtained doorways or rigid gasket doors separated by a dead air space of four feet.
- G. **Air Sampling Professional:** The professional contracted or employed to supervise air monitoring and technical deficiencies in Worker protection equipment and procedures during both planning and on-site phases of an abatement project. This individual shall be a certified California Site Surveillance Technician or a California Certified Asbestos Consultant and have specialized experience in air sampling for asbestos.
- H. **Amended Water:** Water to which a surfactant has been added.
- I. **Area Monitoring:** Sampling of asbestos fiber concentrations within the asbestos Work Area and outside the asbestos Work Area which is representative of the airborne concentrations of asbestos fibers which may reach the breathing zone.
- J. **Asbestos:** The term asbestos includes Chrysotile, Amosite, Tremolite, Anthophyllite, and Actinolite.
- K. **Asbestos Fibers:** This expression refers to asbestos fibers having an aspect ratio of 3:1 and longer than 5 micrometers.
- L. **ASTM:** American Society for Testing and Materials.
- M. **Authorized Person or Visitor:** The building owners, or their authorized representative, Contractor's representative, or any representative of a regulatory or other agency having jurisdiction over the Project.
- N. **Ceiling Concentration:** An exposure of airborne concentrations of asbestos fibers at any time in excess of 10 fibers per cubic centimeters of air.
- O. **CFR:** Code of Federal Regulations.
- P. **Clean Room:** An uncontaminated area or room which is a part of the Work decontamination facility with provisions for storage of worker's street clothes and protective equipment.
- Q. **Curtained Doorway:** A device to allow ingress and egress from one room to another while permitting minimal air movement between the rooms, typically constructed by

placing two overlapping sheets of plastic over an existing or temporarily framed doorway, securing each along the top of the doorway, securing the vertical edge of one sheet along one vertical side of the doorway, and securing the vertical edge of the other sheet along the opposite vertical side of the doorway.

- R. **Decontamination Facility:** A series of connected rooms, with access doorways between any two adjacent rooms, for the decontamination of workers and of materials and equipment. A decontamination facility always contains at least one air lock.
- S. **Encapsulant (sealant):** A liquid material which can be applied to asbestos containing material and which controls the possible release of asbestos fiber 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).
- T. **Encapsulation:** Procedures necessary to apply an encapsulant to asbestos containing building materials to control the possible release of asbestos fibers into the ambient air.
- U. **Encasement:** Procedures necessary to apply an encasement product to an asbestos containing building material to control the possible release of asbestos fibers into the ambient air and to provide closure of the asbestos material to the substrate.
- V. **Enclosure:** Procedures necessary to enclose completely asbestos containing material behind airtight, impermeable, permanent barriers.
- W. **Equipment Decontamination Facility:** That portion of a decontamination unit designed for controlled transfer of materials and equipment, typically consisting of a washroom and a holding area.
- X. **Equipment Room:** A contaminated area or room which is part of the worker decontamination facility with provisions for storage of contaminated clothing and equipment.
- Y. **Fixed Object:** A unit of equipment or furniture in the Work area which cannot be removed from the Work area.
- Z. **Friable Asbestos Material: Asbestos Containing Material (ACM) or Asbestos Containing Construction Material (ACCM)** that can be crumbled, pulverized, or reduced to powder by hand pressure when dry.
- AA. **Glovebag Technique:** A method with limited applications for removing small amounts of friable asbestos-containing material from HVAC ducts, short piping runs, valves, joints, elbows, and other non-planar surfaces in a non-contained work area. The glovebag assembly is a manufactured or fabricated device consisting of a glovebag (typically constructed of 6-mil transparent regulate plastic), two inward projecting long sleeve rubber gloves, one inward projecting water-wand sleeve, an internal tool pouch, 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 who are permitted to use the glovebag technique must be highly trained, experienced, and skilled in this method.

- BB. **HEPA Filter:** A high efficiency particulate air (HEPA) filter capable of trapping and retaining 99.97 percent of particles (asbestos fibers) greater than 0.3 micrometers in mass median aerodynamic equivalent diameter.
- CC. **HEPA Vacuum Equipment:** Vacuuming equipment with a HEPA filter system.
- DD. **Holding Area:** A chamber in the equipment decontamination facility located between the washroom and an uncontaminated area. The holding area comprises an air lock.
- EE. **Log Book:** A notebook or other book containing essential project data and daily project information and a daily project diary. This book is kept on the Project site at all times.
- FF. **Mini-Enclosure:** A method with limited applications for removing small amounts of friable asbestos containing material typical for small-scale, short duration type projects.
- GG. **Movable Object:** A unit of equipment or furniture in the Work area which can be removed from the Work area.
- HH. **NESHAPS:** National Emission Standards for Hazardous Air Pollutants.
- II. **Negative Air Pressure Equipment:** A portable local exhaust system equipped with HEPA filtration and capable of maintaining constant, low velocity airflow into contaminated areas from adjacent uncontaminated areas.
- JJ. **NIOSH:** National Institute of Occupational Safety and Health.
- KK. **Non-Friable Asbestos Material:** Material that contains asbestos in which 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 in excess of the asbestos control limit during any appropriate use, handling, demolition, storage, transportation, processing, or disposal. Also a material which cannot easily be crumbled, pulverized, or reduced to powder by hand pressure when dry.
- LL. **Personnel Monitoring:** Sampling of asbestos fiber concentrations within the breathing zone of an asbestos Worker.
- MM. **Plasticize:** To cover floor, walls, and other surfaces with plastic sheeting as herein specified.
- NN. **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.
- OO. **Shower Room:** A room between the clean room and the equipment room in the worker decontamination unit with hot and cold or warm running water and suitably arranged for complete showering during decontamination. The shower room comprises an air lock between contaminated and clean areas.

PP. **Surfactant:** A chemical wetting agent added to water to improve penetration.

QQ. **Washroom:** A room between the Work area and the holding area in the equipment decontamination area; or between the equipment room and non-work area (2-stage decontamination unit). The washroom comprises an air lock.

RR. **Wet Cleaning:** The process of eliminating asbestos-contamination from building surfaces and objects by using cloths, mops, or other cleaning tools which have been dampened with water, and by afterwards disposing of these cleaning tools as asbestos-contaminated waste.

SS. **Work 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 sealed, plasticized, and equipped with a decontamination enclosure system. A non-contained work area is an isolated or controlled-access work area which has not been plasticized nor equipped with a decontamination enclosure system.

TT. **Worker Decontamination Facility:** That portion of a decontamination facility 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.

1.4 **APPLICABLE DOCUMENTS:**

The current issue of each document shall govern. Where conflict among requirements or with these Specifications exists, the more stringent requirements shall apply.

A. **Regulations:** Comply with applicable federal, state, and local regulations.

1. General - Codes, regulations and references applicable to asbestos abatement work include but are not limited to the following:
2. All Federal, State, Local, and South Coast Air Quality Management District regulations.
3. American National Standards Institute (ANSI) publications;

Z9.2-79 Fundamentals Governing the Design and Operation of Local Exhaust Systems

Z87.1-79 Occupational and Educational Eye and Face Protection

Z88.2-80 Practices for Respiratory Protection

Z89.1-81 Requirements for Protective Headgear for Industrial Workers

Z41-83 Personal Protection - Protective Footwear

- Z88.6-84 Respiratory Protection - Respiratory use Physical Qualifications for Personnel
4. American Society for Testing and Materials (ASTM) publications;
- D331-56 Surface and Interfacial Tensions of Solutions of Surface Active Agents
5. Code of Federal Regulations (CFR);
- 29 CFR 1910.12 Construction Work
- 29 CFR 1910.20 General Safety and Health Provisions Access to Employee Exposure and Medical Records
- 29 CFR 1910 Subpart 1, Personal Protective Equipment
- 29 CFR 1910.145 Specifications for Accident Prevention Signs and Tags
- 29 CFR 1926.1101 Asbestos
- 29 CFR 1926 Asbestos, Tremolite, Anthophyllite, and Actinolite (Including All Mandatory Appendices)
- 34 CFR 231 Appendix C, Procedures for Containing and Removing Building Materials Containing Asbestos
- 40 CFR 61 Subpart A and Subpart M, USEPA, National Emission Standards for Hazardous Air Pollutants (NESHAPS)
6. Compressed Gas, Inc.
- G-7.1 Commodity Specification for Air (1973)
7. National Fire Protection (NFPA)
- No. 70.1984 National Electrical Code
8. UL 586-77 (R1982) Test Performance of High Efficiency Particulate Air Filter Units (June 10, 1977, 5th Ed.; Rev. March 12, 1982)
9. National Institute for Occupation Safety and Health (NIOSH)
- N31, 3rd. Ed., Vol. 1 Manual of Analytical Methods, Method 7400 Fibers
10. Environmental Protection Agency Documents:
- EPA 530-SW-85-007 Asbestos Waste Management Guidance, May 1985
- EPA 560/5-85-024 Guidance for Controlling Asbestos Containing Material in Buildings, June 1985

EPA 600/4-85-049 Measuring Airborne Asbestos Following and Abatement Action, November 1985
EPA 560 OPTS-86.001 A Guide to Respiratory Protection for the Asbestos Abatement Industry, April 1986

11. Department of Transportation (DOT)

DOT 49 CFR, Parts 171-177 regarding the transport of hazardous materials.

12. California Administrative Code (CAC)

Title 8, Article 2.5 Registration Asbestos-Related work (Section 341.6 through 341.14)

Title 8, Section 5208 General Industry Safety Orders, Asbestos Regulations

Title 22, Division 4, Minimum Standards for Management of Hazardous Chapter 30 and Extremely Hazardous Waste

13. Air Pollution Control District Regulations

South Coast Air Quality Management District Rule 1403

B. **Codes and Ordinances:** Comply with all state, county, and city codes and ordinances as applicable.

1.5 SUBMITTALS AND NOTICES:

Prior to commencement of work and/or within the time-frames specified below:

A. **General:** Requirements are as set forth in the General Conditions and Supplementary Conditions (Owner's) for items required to be submitted under this section.

B. **Product data:** Shall include manufacturer's product data, specifications, samples and application instructions and other pertinent information as necessary.

C. **Alternatives:** Product substitution submittal shall be in accordance with the General Conditions and Supplementary (Owner's) Conditions.

D. **Procedure Plans and Shop Drawings:** Submit to the Owner's consultant Procedure Plans and Shop Drawings and ensure that they are in compliance with this Specification and applicable regulations. Shop Drawings will include: construction of decontamination enclosure systems and/or facilities; isolation of the Work areas; placement of negative air machines and their exhaust, emergency exits, and placements of fire extinguishers and first aid kits.

1. Personal monitoring procedures in accordance with T8 CCR 1529.

2. Phasing of abatement work indicating daily roster of workers for each phase.

3. Security system warning signs locations in accordance with 29 CFR 1910.245, T8 CCR 1532.1, and T8 CCR 1529.
 4. Detailed plans for decontamination facilities, toilets, and systems providing inter-room and work area to outside communication showing connections to existing building.
 5. Standard procedures for protecting workers, visitors, and employees and protection of spaces outside work area from contamination.
 6. Engineering systems exposure control indicating number, location, and capacity of supply and exhaust systems, the expected direction of flow, and the range of expected negative air pressure in each area.
- E. **Qualifications: For Public Bid Projects** submit the following documents within seven (7) days from Notice to Proceed or by contract requirements, whichever is greater
1. **License:** Submit copy of current contractor license from the California Contractors State License Board.
 2. **Insurance:** Submit copy of current insurance as required to perform work and as required by the General and Hazardous Materials specifications and Owner and Owner's representative.
 3. **Registration:** Submit copy of the registration for Asbestos-Related Work from the Division of Occupational Safety and Health in accordance with Title 8, Article 2.5 of the California Administrative Code.
 4. **Personnel Training-Superintendent and Foreman (Competent Person):** Submit copy of current certificate signed training institution that he or she has successfully completed a training course in asbestos abatement project supervision (Competent Person) offered by an EPA endorsed and Cal-OSHA accredited educational institution.
 5. **Personnel Training-Workers:** Submit copy of the asbestos abatement employee training program, and certificates signed by each employee that he or she has had instructions on the hazards of asbestos exposure, has had training in asbestos removal, and understands this instruction. Submit copy of current certificate signed by the training institution that he or she has successfully completed a course (or refresher) in asbestos abatement worker training offered by an EPA endorsed and Cal-OSHA accredited educational institution.
 6. **Personal Protection and Exposure Understanding:** Submit documentation to the Owner's consultant indicating that each employee has had instruction on the hazards of asbestos exposure, on use and fitting of respirator, on protective dress, on use of showers, on entry and exit from work areas, and on all aspects of work procedures and protective measures and understands this instruction.
 7. **Respirators:** Submit a written standard operating procedure governing selection, fit-testing, and use of respirators in accordance with 29 CFR 1910, Subpart 1, 29

CFR 1926.1101, CGAI Standard G7.1, ANSI Z88.2, and Z88.6. Also submit manufacturer's certification that the respirators to be used in this project comply with these regulatory requirements.

8. **Medical Examination:** Submit proof that personnel who will be entering contaminated areas have had medical examinations, and furnish the results of said exam to Owner's consultant. Comply with 29 CFR 1910.20 for access to employee exposure and medical records.
 - a. **Exam and History:** Before exposure to airborne asbestos, provide each employee with a comprehensive medical exam meeting the general definition outlined in California Administration Code Title 8 California Code of Regulations. No employee shall be allowed to enter the Work Area without having first provided a copy of his Medical History to the Owner's Representative.
 - b. **Employee Roster:** Submit an employee roster to Owner's consultant for each Work shift and confirm in writing within 24 hours of commencement of shift. The roster will consist of a list of employees who have received training and medical examinations per paragraphs Part 1.5, E.4, E.5, E.6, and E.8 of this section. A copy of this list is to be maintained in the Project Logbook.
 - c. **Proof of Documentation to Physician:** Contractor must provide verification to the Owner's consultant that the employer has provided the following information to the examining physician or physicians:
 - i. A copy of OSHA regulation Standard 29 CFR 1926.1101 and Appendices D, E, and F.
 - ii. A description of the affected employee's duties as they relate to the employee's exposure.
 - iii. The employee's representative exposure level or anticipated exposure level.
 - iv. A description of any personal protective and respiratory equipment used or to be used.
 - v. Information from previous medical examinations of the affected employee that is not otherwise available to the examining physician.

F. Notifications, Permits, Communications, and Postings.

1. **Submit copies of notifications to all appropriate Government agencies, including the following:**
 - a. CAL-OSHA (310) 949-7827 Notification shall be in accordance with the Section 341.9 of Title 8 of California Administrative Code.
 - b. South Coast Air Quality Management District (If required) Hazardous Materials Section:

21865 Copely Drive
Diamond Bar, CA 91765-8142
(909) 396-2336

- c. Any Notifications to EPA.
 - d. All Notifications and Copies of Government agency correspondence shall be included in the submittals and copies are to be kept in the Project Logbook.
 - e. Where local police and fire departments have jurisdiction, secure approval of the proposed security and safety plans for the work prior to submittal to Owner's Representative. Contact both departments for the requirements of the approval process.
2. **Proof of Permits, Site Requirements and Disposal of Waste:** Submit proof satisfactory to the Owner's consultant that all required permits, site location, and arrangements for transport and disposal of asbestos containing materials, supplies, and the like have been obtained. Copies of these items are to be kept in the Project Log Book
 3. **Safety Compliance:** In addition to detailed requirements of this Specification, comply with laws, ordinances, rules, and regulations of federal, state, regional, local authorities, and Owner's representative regarding handling, storing, transporting, and disposing of asbestos waste materials. Comply with applicable requirements of the current issue of 29 CFR 1910, 29 CFR 1926.1101, and 40 CFR 61, Subparts A, & M, 40 CFR 61.152, and CAC Section 5208.
 4. **Standards Interpretations:** Submit matters of interpretation of standards to the appropriate administrative agency for resolution before starting Work. Where requirements of this Specification and reference documents vary, the most stringent requirement shall apply.
 5. **Availability of Regulatory References:** Contractor shall have at least one copy each of 29 CFR 1910, 29. CFR.1910.134; 29 CFR 1926, 40 CFR Part 261, and CAC, Title 8, Section 5208, at his office and also at the job site.
 6. **Posting of Caution Signs:** Before the commencement of any Work at the site, post bilingual EPA and CAL-OSHA caution signs in and around the Work Area to comply with EPA and OSHA regulations.
 7. **Submit Training and Certifications:** Submit proof to the Owner's consultant that all asbestos workers assigned to this project are currently Cal-OSHA certified and accredited as an Asbestos Worker under the Asbestos Hazard Emergency Response Act. Submit proof to the Owner's consultant that at least one employee on each shift shall be currently Cal-OSHA certified and accredited as a Supervisor and shall have successfully completed in the last 12 months a course of instruction meeting the requirement for "Competent Person" (29 CFR 1926.1101).
 8. **Project Logbook Submittals:** Submit front-end documents of Project Logbook. These documents will include copies of the Contractor's Respiratory Protection Program, HUD, and OSHA documents, worker decontamination procedures,

equipment decontamination procedures, authorized personnel list, format of daily report sheets, test reports on waste materials, and format of waste manifests. The completed daily reports and waste manifests shall be submitted along with pay requests for completed work. Copies of these front-end documents shall be maintained at the site during the asbestos removal phase of the Project.

a. Superintendent is required to keep the Project Logbook up to date, ensure that all work criteria is followed in the proper sequence, and to fill out the enclosed check list to document the progression of the job. A separate checklist will be required for each individually prepped work area.

9. **Property Condition Assessment:** Owner, Architect/Engineer, or Owner's consultant, and Contractor must agree in writing on building and fixture condition prior to commencement of Work. The Contractor shall submit an inventory of all items removed from the Work area and an inventory of all items remaining in the Work area.

10. **Informing Other Trades:** The asbestos abatement contractor must inform other employers on site of the nature of the Contractor's work with asbestos-containing materials and the existence of and requirements pertaining to regulated areas. Such notification shall be coordinated with, and approved by, the Owner.

11. **Pressure Strip Recordings (Manometer):** At the termination of the project, submit copies of all pressure strip chart recordings.

G. **Field Air Sampling:**

Personal monitoring and other monitoring which is required by law or considered necessary by the Contractor for Worker protection shall be the responsibility of the Contractor and performed by Contractor's Air Sampling Professional.

H. **Certifications:**

1. **Equipment Certification:** Submit manufacturer's certification that vacuums, negative air pressure equipment filters, and other local exhaust ventilation equipment conform to ANSI Z9.2, as well as all Federal, State, Local, and SCAQMD regulations.

2. **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 submitted to the Owner or Owner's Representative and signed by the rental company.

I. **Use of Vec-loader Equipment:**

The use of the vacuum equipment, its placement, and safety program shall be submitted for review.

1.6 PERSONAL PROTECTION AND SAFETY:

A. **General:** The Contractor alone shall be responsible for the safety, efficiency, and adequacy of his or her plant, appliances, methods, and for any damages which may result from his or her operations, improper construction practices, or maintenance. He or she shall erect and properly maintain at all times as required by the conditions and progress of the Work, proper safeguards for the protection of workmen and the public and shall post warning signs around the job site.

B. Personal Protective Equipment:

1. Provide workers and authorized visitors with sufficient set of protective full body impervious protective clothing. Personal Protective Equipment shall comply with the requirements of 29 CFR 1910, Subpart I.
2. Work clothes shall consist of fire retarding, disposable, full-body coveralls, head covers, boots, rubber gloves, and steeled-toe boots or equivalent in accordance with 29 CFR 1926.134, and ANSI Z41. Sleeves at wrists and cuffs at ankles shall be secure.
3. Provide eye protection and hardhats as required by applicable safety regulations and shall conform to ANSI 87.1 and 89.1.
4. Provide authorized visitors with suitable protective clothing, headgear, eye protection, and footwear whenever they are required to enter Work area.

C. Respiratory Protection Requirements:

1. Disposable (single use) respirators are not to be worn for protection against asbestos.
2. **Providing of Equipment:** Provide all workers, foremen, superintendents, authorized visitors, and inspectors personally issued and marked respiratory equipment approved by NIOSH. When respirators with disposable filters are employed, provide sufficient filters for replacement as recommended by manufacturers or this specification. Selection of respirators shall be made according to the guidance of 29 CFR 1910 Subpart 1, ANSI Z88.2; CGAI G7.1; EPA 560 OPTS-86.001; and Table I of this section. The Contractor shall provide masks, new in the box, in all sizes produced by the respirator manufacturer (one each). These masks shall be provided for the exclusive use of the Owner's representatives and shall be available at all times.
3. **Approved Respirators:** Contractor will ensure that all respirators used shall be selected from those approved by National Institute of Occupational Safety and Health (NIOSH) for use in atmospheres containing asbestos, solvents, removers, and against other toxic materials which may be used during the project.
4. **Powered Air-Purifying Respirators (PAPR) Usage:** Full containment work activities associated with the abatement of asbestos-containing materials shall be conducted while wearing, at a minimum, a full facepiece, powered air-purifying respirator equipped with HEPA filters during the following tasks or under the following conditions:

- a. During removal or disturbance of asbestos-containing materials. Or where the likelihood of disturbance may occur. This determination shall be up to the Owner's consultant.
 - b. During all cleanup and wipe down of area. This determination shall be up to the Owner's consultant.
 - c. During any operation where damaged friable asbestos is present during area preparation.
 - d. At any time that air monitoring levels indicate that asbestos concentrations are greater than 0.25 fibers/cc.
 - e. Any situation where gross contamination has occurred because of a tear or rupture in the containment and air sampling indicates that airborne asbestos levels have exceeded 0.25 fibers/cc.
5. **1/2 Mask Respirator Usage:** For the followings tasks or conditions a 1/2 mask air-purifying respirators equipped with high efficiency filters may be used:
- a. Provided maximum airborne fiber concentration outside the respirator is at or below 0.1 fibers/cc.
 - b. Pre-construction sealing of openings and penetrations to the work areas with plastic sheeting.
 - c. Decontamination of removable items.
 - d. Loading asbestos-containing drums on truck for transportation and unloading bags at approved landfill.

TABLE 1

Maximum Airborne Fiber Concentration Outside The Respirator	Protection Factor	Minimum Acceptable Respirator
1 fiber/cc**	10	Half mask and dual cartridge air purifying respirator with cartridges approved for asbestos and with high efficiency filters.*
05 fibers/cc	50	Full face piece respirator and with high efficiency filters.*
10 fibers/cc	100	Powered air purifying respirator (full face piece) and with high efficiency filters.*
100 fibers/cc**	1000	Type "C" supplied air respirators, full facepiece, pressure demand mode.
Over 100 fibers/cc**	>1000	Type "C" supplied air respirators, full facepiece, pressure demand mode, equipped with an auxiliary positive pressure self-contained breathing apparatus.

*Greater respiratory protection is always acceptable regardless of asbestos concentrations.

**Must demonstrate that the fiber levels will not exceed 0.01 fibers per cubic centimeter (f/cc) inside the respirator based on quantitative mask fit testing for each individual using the respirator protection factor formula.

6. **Type "C" Respirator Usage:** When Type "C" respirators are not required according to the OSHA standard (29 CFR 1926.1101 or this specification, whichever is more stringent), provide workers with approved, permanent, personally-issued and marked respirators with replaceable filters. Provide sufficient quantity of filters approved by NIOSH for use in asbestos environments so that workers can change filters as required by manufacturer during the workday. Filters shall not be used any longer than one workday. Respirator filters shall be stored at job site in clean room and shall be totally protected from exposure to asbestos prior to their use.
7. **Air Supply Compressors:** Compressors shall meet the requirements of 29 CFR 1910 Subpart 1 and the following:
 - a. Periodic inspection of the carbon monoxide monitor shall be evidenced.
 - b. Documentation of adequacy of compressed air system/respiratory protection system shall be retained on site. Documentation shall include a list of compatible components with the maximum number and type of respirators that may be used with the system.
 - c. The full facepiece, type "C" supplied-air respirator system shall be fully approved by appropriate regulatory agencies. The compressor shall be specifically for breathing air and have alarms to indicate compressor failure and overheating. Compressor(s) shall have in-line air-purifying sorbent beds and filters to assure breathing air quality (Grade "D" or better for oil lubricated compressors; Grade "H" or better for electric compressors). The air supply system shall have safeguards to allow for sufficient capacity to allow workers to escape if the air system fails. If an oil-lubricated compressor is used, it shall have a high-temperature or carbon-monoxide alarm, or both. If only a high-temperature alarm is used, a carbon-monoxide converter shall be used.
 - d. The compressor intake shall be designed so as to avoid entry of contaminated air into the system either from the compressor exhaust or from other sources of potential contamination. Periodic testing of compressed air shall insure that systems provide air of sufficient quality.
 - e. A pressure-indicating gauge shall be placed at the point of connection (distribution point) where the respirator supply hose (which is a part of the approved facemask/hose system) is attached to the air filtration system or any supply manifold which is located between the mask/hose apparatus and the compressor/filter system. The pressure gauge shall be capable of measuring pressure levels which are consistent with those specified by the respirator operating specifications.
 - f. The correct pressure level shall be verified at each distribution point each time that the system is engaged. The air supply system will be operated only when operating specifications are maintained.

Fit Testing: Air respirators shall be fit-tested utilizing Saccharin Solution Aerosol Protocol, Bitrex™ (Denatonium Benzoate) Solution Aerosol

Protocol or isoamyl acetate Protocol with organic filters at the beginning of each project or a minimum of every 12 months as described in Appendix C, 29 CFR 1926.1101. Any of the above three protocols or other similar regulatory protocol may be used.

D. Bilingual Worker protection procedures (Posted in both English and Spanish): Adequate shower facilities shall be provided by the Contractor. An employee leaving the Work area shall follow all decontamination procedures necessary or as described herein.

1. **Posted Procedures:** Provide and post, in the Equipment Room and the Clean Room, the decontamination and work procedures to be followed by workers and authorized visitors as described in these Specifications.
2. **Entering the Work Area:** Each worker and authorized visitor shall, upon entering the job site: put on a respirator and clean protective clothing before entering the Equipment Room or the Work area. Clothing that is appropriate for weather and temperature conditions is worn under the protective clothing.
3. **Personnel Exiting the Work Area:**
 - a. Ensure that personnel do not leave work areas through the equipment decontamination enclosure.
 - b. All workers and authorized visitors shall, each time they leave the Work area; remove gross contamination from clothing before leaving the Work area using a HEPA vacuum; proceed to the Equipment Room and remove all clothing except respirators by carefully rolling down the garment to reduce exposure to dust; clean the outside of the respirator with soap and water while showering; remove the respirator; and thoroughly shampoo and wash themselves.
 - c. Following showering and drying off, each Worker shall proceed directly to the clean change room and dress in clean clothes at the end of each day's Work, or before eating, smoking, or drinking.
 - d. Before reentering the Work area from the Clean Change Room, each worker and authorized visitor shall put on a clean respirator and shall dress in clean protective clothing.
 - e. All workers and authorized visitors shall, at the end of the work day; place disposable clothing in the abatement waste; clean protective gear, including respirators, according to standard procedures; wash hands and face again; proceed to the shower facilities, being certain to wash hair.
 - f. Workers shall not eat, drink, smoke, or chew gum or tobacco while in the Work area.
 - g. Workers shall be fully protected with respirators and protective clothing from the time of first disturbance of asbestos-containing materials prior to commencing actual abatement and until final cleanup is completed.

4. **Equipment Removal Procedures:** Clean surfaces of contaminated containers and equipment thoroughly by wet sponging or wiping before moving such items into the equipment decontamination enclosure system washroom or through the shower for final cleaning and removal to uncontaminated areas.
- a. Contaminated work footwear shall be stored in the Equipment Room when not in use in the Work area. Upon completion of asbestos abatement, dispose of footwear as contaminated waste.
 - b. 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.
5. **Safety Issues:**
- a. During the removal operations the Contractor may be placing his or her workers in a potentially hazardous electrical environment. Care and special consideration should be exercised by the Contractor to avoid electrical shock to his employees. The requirements as set forth in the latest edition of the National Electrical Code, shall be adhered to at all times. Particular emphasis shall be placed on the requirements listed in Article 210—BRANCH CIRCUITS, Article 225—OUTSIDE BRANCH CIRCUITS AND FEEDERS, Article 250—GROUNDING, Article 300—WIRING METHODS, and Article 305—TEMPORARY WIRING, whenever and wherever the existing electrical power service shall be deenergized and temporary electrical power utilized.
 - b. During summer work activities the Work area environment may be very hot and humid. The Contractor shall take precautions to protect his or her workers from the hostile environment as well as the asbestos material. First-aid items such as stretchers, water, and cold packs should be kept adjacent to the Work area exits, thus allowing any personnel requiring emergency treatment egress from the Work area with minimum contamination to the clean environment. No worker shall be allowed to reach through the plastic or air lock door to get water or first aid supplies during break periods inside the Work area. Breaks, lunch, or worker rest periods should be held outside the Work area. All decontamination procedures shall be followed prior to exiting the Work area except in extreme emergencies.
 - c. During cold weather periods the workers shall be provided with adequate protection from the environment to not cause harm to the workers.
 - d. If evacuation of the Work area is required by contaminated personnel, due to an emergency, all work efforts shall stop, and all forces shall be directed at minimizing the area contamination, cleanup operations, and first-aid procedures. These activities shall be noted in the daily logbook.
 - e. During work activities requiring decontamination procedures, the Contractor shall provide a means of communication for the workers inside the Work area without requiring personnel to enter or leave the Work area. This method of

communications shall be a two-way radio, localized wire-connected telephone, or similar system. This communication system shall remain intact until the final containment plastic is removed. Then all equipment shall be wiped down, HEPA vacuumed or disposed of as asbestos-contaminated material.

E. Posting of Warning Signs:

Post two safety warning signs which follow the "Sample Format Warning Sign" shown below:

Sample Format Warning Sign
Minimum Size - 24" x 36"
Material - Aluminum or Fiberglass
Script:

DANGER

ASBESTOS

CANCER AND LUNG DISEASE HAZARD

AUTHORIZED PERSONNEL ONLY

RESPIRATORS AND PROTECTIVE
CLOTHING ARE REQUIRED
IN THIS AREA

Signs shall be at the entry points to the Work area and shall be clearly read to a distance of 25 feet from the entry point.

F. Emergency Precautions and Procedures:

1. Establish emergency and fire exits from the Work Area. Emergency exits shall be equipped with 2 full sets of protective clothing and respirators.
2. Local medical emergency personnel, both ambulance crews and hospital emergency room staff, shall be notified, prior to commencement of abatement operations, as to the possibility of having to handle contaminated or injured Workers and shall be advised on safe decontamination.
3. Contractor shall be prepared to administer first aid to injured personnel after decontamination. Seriously injured personnel shall be treated immediately or evacuated without delay for decontamination. When an injury occurs, the Contractor shall stop Work and implement fiber reduction techniques (e.g., water spraying) until the injured person has been removed from the Work Area.
4. Before starting actual removal of asbestos material(s), local police and fire departments (LA County required) shall be notified as to the danger of entering the Work Area. The Contractor shall make every effort to help these agencies form plans of action should their personnel need to enter the contaminated area.

1.7 **SUPERINTENDENT FOREMAN, CRAFTSMAN:**

The Contractor shall have a job superintendent (Competent person) present at all times while work on this Contract is in progress.

The Project Superintendent (Competent person) shall be thoroughly familiar and experienced with asbestos removal and related work and shall be familiar with and shall enforce the use of all safety procedures and equipment. He or she shall be knowledgeable of all EPA, OSHA, and NIOSH requirements and guidelines. He or she shall be trained in the proper use of all personal protection and safety equipment including, but not limited to, air purification and respiratory systems.

In addition to the Superintendent (Competent person), the Contractor shall furnish 1 or more foremen (Competent person when Superintendent is absent) who are familiar and experienced with asbestos removal and its related work, safety procedures, and equipment.

- A. It shall be a requirement of this Contract that the superintendent and/or one or more of the Contractor's foremen be inside the Work area at all times while work is in progress.
- B. It is the intent of these Specifications that all phases of the Work shall be executed by skilled craftsmen experienced or receiving training by experienced personnel in each respective trade.
- C. All superintendents and foremen shall have been trained by attending a five-day AHERA and Cal-OSHA approved Contractor/Supervisor of Asbestos Abatement training course and satisfactorily passing all examinations following the training program to allow and maintain all Federal, State, and local requirements and certifications. Only EPA and Cal-OSHA approved training programs will be accepted.
- D. Workers shall have been trained by attending an AHERA and Cal-OSHA approved Asbestos Worker training course and satisfactorily passing all examinations following the training program to allow and maintain all Federal, State, and local requirements and certifications. Only EPA and Cal-OSHA approved training programs will be accepted.
- E. The Competent person on-site must be able to clearly communicate in a manner so that the Owner's Consultant and Owner can clearly understand.

PART 2 - MATERIAL AND EQUIPMENT

2.1 **MATERIALS:**

- A. **Packaging:** Deliver all materials in the original packages, container, or bundles bearing the name of the manufacturer and the brand name.
- B. **Storage:** Store all materials subject to damage off the ground, away from wet or damp surfaces, and under cover sufficient to prevent damage or contamination. Damaged or deteriorating materials shall not be used and shall be removed from the premises. Material that becomes contaminated with asbestos shall be disposed of in accordance with the applicable regulations.
- C. **Plastic:** (Fire retardant polyethylene) Sheet, of 6-mil thickness or greater as specified in sizes to minimize the frequency of joints.
- D. **Tape:** Capable of sealing joints of adjacent sheets of polyethylene and for attachment of polyethylene sheet to finished or unfinished surfaces of dissimilar materials and capable of adhering under both dry and wet conditions. Use tape with tough backing which does not leave residue on the adhering surface.

E. **PROTECTIVE PACKAGING**

- 1. **Impermeable containers:** Suitable to receive and retain any asbestos-containing materials until disposal at an approved site, labeled in accordance with OSHA Regulation 29 CFR 1910.1025 and DOT 49 CFR 171-177. Containers must be both air and watertight and must be resistant to damage and rupture. Drums must be appropriately labeled.
 - 2. **Bags:** Appropriately labeled 6-mil sealable polyethylene bags as minimum.
 - 3. **Bilingual labels:** (English and Spanish) on containment glove bags, waste packages, contaminated material packages and other containers shall be in accordance with EPA and/or OSHA standards.
- F. **Warning labels and signs:** As required by 29 CFR 1926.1101 and 29 CFR 1910.145.

G. **Encapsulant use:**

- 1. For bridging encapsulant use:
 - a. Encapsulant to be specified and approved by Owner's representative
- 2. After removal use clear encapsulant as follows:
 - a. Encapsulant to be specified and approved by Owner's representative

3. At steam piping lagging to be encapsulated in place use penetrating encapsulant as follows:
 - a. Encapsulant to be specified and approved by Owner's representative
4. Protective coating at encapsulated steam, pipe lagging:
 - a. NOT APPLICABLE

H. Surfactants:

Surfactants or wetting agent, for amending water will be 50 percent polyoxyethylene ether and 50 percent polyoxyethylene ester, or equivalent, at a concentration of one ounce per 5 gallons of water.

I. Encasement:

1. Encasement material to be specified and approved by Owner's representative
2. Characteristics
 - a. Meets DNA and EPA 95 guidelines for clean air.
 - b. Non-toxic — Non caustic — Non flammable
 - c. Grease and oil retardant
 - d. Mar resistant
 - e. Crack resistant
3. Suitable Product
 - a. Encapsulant to be specified and approved by Owner's representative

J. Lagging adhesive:

1. Meets NFPA 90A Code;

K. Other materials:

Provide all other materials, such as lumber, nails, and hardware, which may be required to construct and dismantle the decontamination area and the barriers that isolate the Work area.

2.2 TOOLS AND EQUIPMENT:

- A. **Provide suitable tools for asbestos removal.**
- B. **Air filtration equipment:** High efficiency particulate air (HEPA) filtration systems shall be equipped with filtration equipment in compliance with ANSI Z9.2-79, local exhaust ventilation or equal. **Each HEPA machine will have current permitting stickers, if applicable, placed on the machine and documentation provided on-site.** No air movement system or air filtering equipment shall discharge unfiltered air outside the Work area. If volatile chemicals are used, use manufacturer's guidelines and provide appropriate filters for solvent vapor or other organic based material use.
- C. **Pressure recorder (manometer):** A continuously recording monitor shall measure and record the difference in air pressure inside the Work area from that outside the Work area. The recording system shall be accurate to the nearest 0.001 inches of water pressure differential and shall be equipped with an alarm which sounds if the difference becomes less than 0.02 inches of water gauge.
- D. **Aggressive sampling equipment:** Contractor shall provide a one Hp electric leaf blower and sufficient number of electric box fans for the final air clearance.

PART 3 - EXECUTION

3.1 PREPARATION:

A. **Separation of Work areas:**

Separation of work areas from occupied areas as directed in the scope of work:

1. **Reference:** Contractor will use the applicable procedures as outlined in Section 01010HM or, if none, use those contained within. Where conflict among requirements (e.g., other concurrent work) or with these Specifications exists, the more stringent requirements shall apply.
2. **For areas requiring constructed barrier walls:** Separate parts of the building required to remain in use (as shown in Plans) from parts of the building that will undergo asbestos removal by means of airtight barriers, constructed as follows:
 - a. Build suitable wood or metal framing and apply 3/8-inch minimum thickness sheathing on work side only, unless noted otherwise.
 - b. Cover both sides of partition with double layer of plastic sheet with joints staggered and sealed with tape. Edges of partition at floor, walls, and ceiling shall be caulked airtight.

3. **Electrical Shut-down:** Shut down electric power which serves the Work area. Provide temporary power and lighting and ensure safe installation of temporary power sources and equipment per applicable electrical code requirements.
4. **HVAC Shut-down:** Shut down and isolate heating, cooling, and ventilating air systems to prevent contamination and fiber dispersal to other areas of the structure. Physically blank off, with light gage metal, all supply and return air ductwork which leads to and from an isolated work area when the air-handling unit serves areas other than within the isolated work area.
5. **Seal off openings:** Seal off all openings, including but not limited to windows, corridors, doorways, skylights, ducts, grills, diffusers, and any other penetrations of the Work areas, with plastic sheeting (minimum of 4-mils thick) sealed with tape.

B. Preclean work area:

1. **Moveable Objects:** Clean all moveable objects within the Work area using HEPA vacuum equipment and wet cleaning methods. Remove these objects from the Work area to a designated temporary storage location.

Protection of and accounting for the stored materials is the sole responsibility of the Contractor.

2. **Fixed Objects:** Preclean fixed objects within the proposed work areas, using HEPA vacuum equipment and/or wet cleaning methods as appropriate, and enclose with minimum of 6-mil polyethylene sealed with tape.
3. **Vacuum & Wet Methods:** Preclean the proposed work areas using HEPA vacuum equipment or wet cleaning methods as appropriate. Do not use methods that raise dust, such as dry sweeping or vacuuming with equipment not equipped with HEPA filters.

C. Prepare work area:

1. **References:** Contractor will use the applicable procedures as outlined in Section 01010HM or, if none, use those contained within. Where conflict among requirements (e.g., other concurrent work) or with these Specifications exists, the more stringent requirements shall apply.
2. **Non-Contaminated Lighting:** Remove and clean objects, such as lights and other items not previously sealed off, that may interfere with asbestos removal. Use HEPA vacuum equipment and wet methods during fixture removal to reduce asbestos dispersal. Wrap in plastic and store for reinstallation upon completion of testing procedures.
3. **Protection of Fixed Objects:** Protect all fixtures, grills, lockers, and other non-removable equipment from water. Also, protect painted surfaces and flooring.
4. **Plasticization:** Cover floor, wall and ceiling surfaces with plastic sheeting sealed with tape. Use a minimum of two layers of 6-mil plastic on floors and two layers of

4-mil plastic on walls. Cover floors first so that plastic extends at least 12 inches up on walls, then cover walls with plastic sheeting to the floor level, thus overlapping the floor material by a minimum of 12 inches.

- a. All criticals (doors, vents, openings, wall penetrations, etc.) will be covered with 2 layers of 6-mil plastic and secured with duct tape to prevent leakage of air.
 - b. The second layer of floor sheeting may be black or dark in color. If floor coverings are scheduled for removal, per Plans and/or Scope of Work, floor plastic is not placed until after floor coverings are removed, which occurs during Asbestos Removal activities, paragraph 3.2.
 - c. All joints in the plastic sheeting shall have a minimum of 12 inches of overlap and shall be securely sealed with tape to prevent leakage of air and water.
5. **Plasticization of carpeted areas:** Where carpet will remain in-place and must be protected during abatement procedures, the following applies for preparation of said surface.
- a. All carpet remaining in place during abatement activities will be covered with 2 layers of 10-mil reinforced plastic and secured with duct tape to prevent moisture intrusion or asbestos contamination.
 - b. Each layer of floor sheeting shall be installed separately and seams between the top and bottom layers must be staggered by approximately three (3) feet.
 - c. Seams on the same layer must have at a minimum 18 inches overlap and be held in place by the use of spray glue in the overlap area and duct tape at both plastic termination edges.
 - d. Both top and bottom layers of plastic must extend to a distance of one (1) foot vertically on all walls and vertical surfaces to be covered. The plastic must be folded, not cut, at wall or corner junctures as it extends vertically. The folds shall be held in place by the use of spray glue and duct tape.
6. **Emergency Exits:** Maintain emergency and fire exits from the Work areas or establish alternative exits satisfactory to fire officials.
7. **Establish a reduced pressure in the Work area:**
- a. **Determine the Ventilation Requirements:**

(1) **General:** Provide fully operational negative pressure systems supplying a minimum of one air change every 15 minutes. Determine the volume in cubic feet of the work area by multiplying floor area by ceiling height. Determine total ventilation requirement in cubic feet per minute (cfm) for the work area by dividing this volume by the air change rate.

Ventilation Required (CFM) = Volume of work area (cu. ft.)/15 min.

(2) **Number of Units:** Determine number of units needed to achieve 15 minute change rate by dividing the ventilation requirement (CFM) above by capacity of exhaust units(s) used. Capacity of a unit for purposes of this section is the capacity in cubic feet per minute with fully loaded filters (pressure differential which causes loaded filter warning light to come on) in the machines labeled operating characteristics.

$$\text{Number of Units Needed} = \frac{\text{Ventilation Requirement (CFM)}}{\text{Capacity of Unit with Loaded Filters (CFM)}}$$

Add one additional working unit as a backup in case of equipment failure or machine shutdown for filter changing.

(3) **Location of Exhaust Units:** Locate exhaust unit(s) so that makeup air enters work area primarily through decontamination facilities and traverses work area as much as possible. This may be accomplished by positioning the exhaust unit(s) at a maximum distance from the worker access opening or other makeup air sources.

Place end of unit, or its exhaust duct, through an opening in the plastic barrier or wall covering. The plastic around the unit or duct shall then be sealed with tape.

(4) **Venting or Exhaust:** Unless authorized in writing by the Local Air Quality Management District, vent negative air exhaust to outside of building. Exhaust outlet shall be a minimum of ten feet above ground level.

(5) **Supplemental makeup air inlets:** Provide where required for proper air flow through the work space in location approved by the Project Coordinator by making openings in the plastic sheeting that allow air from outside the building into the work area.

(6) **Makeup Air Inlets:** Locate auxiliary makeup air inlets as far as possible from the exhaust unit(s) (e.g., on an opposite wall), off the floor, and away from barriers that separate the work area from occupied clean areas. Cover with flaps to reseal automatically if the negative pressure system should shut down for any reason. Spray flap and around opening with spray adhesive so that flap seals if it closes.

b. **Use of the Negative Pressure System:**

(1) **General:** Each unit shall be serviced by a dedicated minimum 115V-20A circuit with overload device tied into an existing building electrical panel that has sufficient spare capacity to accommodate the load of all negative pressure units connected. Dedication of an existing circuit may be accomplished by shutting down existing loads on the circuit.

(2) **Testing the System:** Test negative pressure system before any asbestos-containing material is wetted or removed. After the work area has been prepared, the decontamination facility set up, and the exhaust unit(s)

installed, start the unit(s) (one at a time). Demonstrate operation and testing of negative pressure system to Project Coordinator.

(3) **System Evaluation:** A demonstration of the negative pressure system to the Project Coordinator will include, but not be limited to, the following:

- aa. Plastic barriers and sheeting move slightly in toward work area.
- bb. Curtain of decontamination units move slightly in toward work area.
- cc. There is a noticeable movement of air through the decontamination unit. Use smoke tube to demonstrate air movement from Clean Room to Shower Room, from Shower Room to Equipment Room, and from Equipment Room to Work Area.
- dd. Use smoke tubes to determine a positive motion of air across all area in which work is to be performed.
- ee. Use a differential pressure meter or manometer to demonstrate a pressure difference of at least 0.02 inches of water across every barrier separation the Work Area from the balance of the building or outside.
- ff. Modify the negative pressure system as necessary to successfully demonstrate the above.

D. Decontamination Facilities:

1. **General:** Contractor will use the applicable procedures as outlined in Section 01010HM or, if none, use those contained within. Where conflict among requirements (e.g. other concurrent work) or with these Specifications exists, the more stringent requirements shall apply.
2. **Construction Review:** Build suitable decontamination facilities described herein, as previously submitted for review, before start of construction.
3. **Air Locks and Access Doorways:** In all cases access between contaminated and uncontaminated rooms or areas shall be through an air lock previously defined. Passage between any two rooms within the decontamination facility shall be through an access doorway.
4. **3-Stage Decontamination Enclosure:** Construct a worker decontamination enclosure system contiguous to the Work area consisting of three totally enclosed chambers to conform to standard Plans bound herein and as follows.
 - a. A shower room with two access doorways, one to the equipment room and one to the clean room. Plastic, if used, on shower room and adjoining equipment and clean rooms shall be opaque.

- b. The shower room shall contain at least one shower with hot and cold or warm water. Careful attention shall be paid to the shower enclosure to ensure against leaking of any kind.
 - c. Shower water shall be captured and filtered. The filtration system shall filter particulates to 3-microns. Filtered water may then be disposed of in the local sanitary/sewage system.
5. **Remote Decontamination Enclosures:** For remote decontamination systems (non-contiguous to the Work area) construction of the shower will conform to Section 2071, Part 3.1,D4, above with the following modifications:
 - a. The enclosure need not be attached to the Work area, but clean room and equipment rooms must be clearly marked at their respective entrances.
 - b. A HEPA filtration machine must be attached to the equipment room and must be operational while the decontamination unit is in use.
6. **Equipment Decontamination Enclosures:** For an equipment decontamination enclosure facility, construct two totally enclosed chambers as follows:
 - a. A washroom, constituting an air lock, with an access doorway to a designated area of the Work area and an access doorway to the holding area.
 - b. A holding area, constituting an air lock, with an access doorway to the washroom and an access doorway to an uncontaminated area.
7. **Entry/Exit systems:** All decontamination systems or entry/exit system air locks will be constructed using Z-flap design incorporating 2 layers of 6-mil plastic with the flaps extending the full height and width of the entrance space.

E. Maintenance of enclosure system:

1. Ensure that barriers and plastic linings are effectively sealed and taped. Repair damaged barriers and remedy defects immediately upon discovery.
2. Visually inspect enclosures at the beginning of each work period.
3. Use smoke methods to test effectiveness of barriers when directed by Owner or representative of Owner.

F. Asbestos removal work shall not commence until:

1. Arrangements have been made for disposal of waste at an acceptable site.
2. Work areas and decontamination facility and parts of the building required to remain in use are effectively segregated.
3. Tools, equipment, and material waste receptors are on hand.
4. Arrangements have been made for building security.

5. All other preparatory steps have been taken and applicable notices posted and permits obtained.
6. Removal work will not begin until the Owner's consultant authorizes work to commence, in writing.

3.2 ASBESTOS REMOVAL:

A. **General:** Prepare the site per paragraph 3.1.

B. **References:** Contractor will use the applicable procedures as outlined in Section 01010HM or, if none, use those contained within. Where conflict among requirements (e.g., other concurrent work) or with these Specifications exists, the more stringent requirements shall apply.

C. **Negative pressure system during abatement Operations:**

1. Start exhaust units before beginning work (before any asbestos-containing material is disturbed). After abatement work has begun, run units continuously to maintain a constant negative pressure until decontamination of the work area is complete. Do not turn off units at the end of the work shift or when abatement operations temporarily stop.
2. Start abatement work at a location farthest from the exhaust units and proceed toward them. If an electric power failure occurs, immediately stop all abatement work and do not resume until power is restored and exhaust units are in operation again.
3. At completion of abatement work, allow exhaust units to run to remove airborne dust that may have been generated during abatement work and cleanup and to purge the work area with clean makeup air. The units may be required to run for a longer time after decontamination if dry or only partially wetted asbestos material was encountered during any abatement work.

D. **Contaminated Removable Objects:**

1. For re-installable fixtures: When scheduled to be removed per Plans and/or Section 01010HM, Scope of Work, remove and clean ceiling mounted objects, such as lights and other items not previously sealed off, that may interfere with asbestos removal. Use hand-held water spraying or HEPA vacuum equipment during fixture removal to reduce fiber dispersal. Decontaminate the objects, wrap in plastic and store for reinstallation upon completion of testing procedures.
2. When scheduled for removal per Plans and/or Section 01010HM, Scope of Work, remove carpeting, carpet backing, window curtains, etc., in sections of appropriate size for packaging and dispose of as contaminated waste.

E. **Contaminated Non-Removable Objects:**

1. If a ceiling tile/grid system remains within the Work area: Remove ceiling tiles and grid system within the Work area and dispose of as contaminated waste. If approved by the Owner's consultant or the Engineer/Architect, the grid system may be removed, decontaminated, sealed in plastic, and stored for reinstallation.

F. Amended Water Usage:

1. Spray asbestos material with amended water, using spray equipment capable of providing a "mist" application to reduce the release of fibers. Saturate the material sufficiently to wet it to the substrate without causing excess dripping. Spray the asbestos material repeatedly during work process to maintain wet condition and to minimize asbestos fiber dispersion.
2. Protect all fixtures, grills, lockers, and other non-removable equipment from amended water. Surfactants can cause oxidation. Also, protect painted surfaces and flooring.

G. Gross Removal:

1. Remove the saturated asbestos material in manageable sections. Materials shall not be allowed to dry out. Material drop shall not exceed 15 feet. For heights up to 50 feet provide inclined chutes or scaffolding to intercept drop. For heights exceeding 50 feet provide enclosed dustproof chutes.

H. Containerizing Waste:

1. **Daily containerizing:** During each day's work, the bulk asbestos material shall be bagged in 6-mil thick bags, before it dries. No asbestos material shall be allowed to lie on the floor overnight.
2. **Types of containers:** Place the material in either sealed containers (6-mil double bags or hard sealable containers).
3. **Vec-loaders:** The use of vacuum equipment may be employed to remove gross asbestos material from the Work area. Checking of the entire system, when in use, is required every 1/2 hour. When use of such equipment is practical, a safety program shall be established to control release of asbestos fibers from routine operations and/or accidents.
4. **Labels:** Place caution labels on containers in accordance with OSHA Regulation 29 CFR 1926.1101 and DOT 49 CFR 171-177 if not already preprinted on containers.
5. **Cleaning:** Clean external surfaces of containers thoroughly by wet sponging in the designated area. Move containers to washroom, wet clean each container thoroughly, and move to holding area pending removal to uncontaminated areas. If the holding area is outside containment it will be a locked and secured area with appropriate warning signage at entrance. If holding area is within containment ensure that area is secure and appropriate signage is maintained.

6. **Safety:** Ensure that containers are removed from the holding area by workers who have entered from uncontaminated areas dressed in clean coveralls.
- I. **Post Removal Cleaning:** After completion of stripping work, all surfaces from which asbestos has been removed shall be wet brushed and sponged or cleaned by an equivalent method to remove all visible material. During this work, the surfaces being cleaned shall be kept wet. At the Contractor's option, the layer of plastic exposed to the asbestos may be removed, leaving intact the final layer of plastic.
- J. **Safety:** Ensure that workers do not enter from uncontaminated areas into the washroom or the Work area; ensure that contaminated workers do not exit the Work area through the equipment decontamination enclosure system.

3.3 **CLEANUP AND AIR MONITORING:**

Employ the following procedures in cleaning up the Work area:

- A. **Pre-Cleaning:** Wet clean all surfaces and remove all visible accumulation of asbestos containing material from the Work area including the top layer of plastic if not previously removed. Prepare the Work area for the initial pre-TEM air test (if so specified) which will be performed after a visual inspection.
- B. **Pre-TEM Clearance:** Once the Work area is clean of visible accumulations of asbestos material, the Owner's consultant may perform a pre-TEM clearance test if so outlined in the Scope of Work (Section 01010HM). Such testing shall be within the limits of 0.02 f/cc using the NIOSH method 7400 (PCM). The Contractor will continue the wet cleaning process until the designated fiber level is achieved. It is the Owner's intent to pay for one Pre-TEM Series of air tests per area.
- C. **Encapsulation:** After successful completion of the Pre-TEM air test, if so designated, and visual inspection has been completed finding that no visible debris has been found and/or before the last layer of the plastic sheeting is removed, apply one coat of an asbestos encapsulant sealer following manufacturer's recommendations for application. The encapsulant sealer shall be compatible with any material to be reapplied to the surface.
- D. **Final Plastic Layer Removal:** While still under respirator protection, or other approved respirator usage, remove the final layer of plastic sheeting from the walls and floors after the sealant has dried. The seals on the windows, vents, doors, etc., shall remain, and HEPA filtration equipment and decontamination facilities shall also remain in service. Wet clean or HEPA vacuum work area underneath the plastic and leave the area visibly clean.
- E. **Settling Period:** Enter a 24-hour settling period or other period approved by the Consultant. Dust, both visible and invisible, shall be allowed to settle within the Work area without being disturbed during this period. The minimum settling period shall be 4 hours.

- F. **Final Cleaning:** After the settling period, wet clean or HEPA vacuum all surfaces within the Work area. Once this cleaning operation is complete, visually inspect the Work area to ensure that it is free of contamination.
- G. **Final Visual Inspection:** Owner's consultant will conduct a thorough visual inspection prior to setting air pumps. Upon successful completion of the visual inspection and Owner's consultant determination that all surfaces in the Work area are dry and free of contamination, the final air clearance test will be conducted. A certificate of Visual Inspection shall be issued by the Owner's Representative and shall be signed by both the contractor and the Owner's Representative. The Owner's Representative shall use the attached Form A.
- H. **Final Air Clearance:** For areas where material removal amounts of greater than 160 square feet or 260 lineal feet are performed, air clearance shall be performed per Section 2080. For areas where material removal amounts of \leq 160 square feet or 260 lineal feet are performed, air clearance will consist of five (5) TEM samples within the work area . The NIOSH method 7400 equivalent analysis will be used, as applicable, with a maximum fiber level of 0.01 f/cc being achieved prior to acceptance. In addition to the NIOSH method 7400 equivalent analysis, one of the five TEM sample cassettes shall be analyzed via TEM. TEM sample analysis must also pass as per requirements of Section 2080.
1. Aggressive sampling techniques will be used to reentrain any fibers on the walls or floors in each area to be tested. The Contractor shall provide 1 electric, 1 Hp "Leaf Blower" and 1 electric 20 inch box fan per 10,000 c.f. of air volume in the Work area for use by the Owner's consultant during the aggressive sampling. The Contractor shall also provide the necessary electrical supply for these units. All contractor supplied equipment shall be in good working order. After sampling, the leaf blower and fans shall be cleaned by the Contractor and handled as if contaminated with asbestos.
- I. **Clearance Failure Contingency:** Contractor shall continue cleaning the Work site until the accepted fiber level is achieved.
1. Additional TEM or equivalent testing required after the one initial TEM clearance test set will be the responsibility of the Contractor. Additional consultant's time required for additional visual inspection, clearance sampling, and associated delivery of samples shall be at the Contractor's expense. In the event of additional testing and associated consultants time, the Contractor may reimburse Owner, or reduce the Contract amount by change order. It is the Owner's intent to have, at no charge to the Contractor, one initial TEM test performed in each area. A test set may consist of one sample or a series of samples performed at the same time.
- J. **Dismantling the negative air system:** When a final inspection and the results of final wipe tests indicate that the area has been decontaminated, exhaust units may be removed from the work area. Before removal from the work area, remove and properly dispose of pre-filter, and seal intake to the machine with 6-mil polyethylene to prevent environmental contamination from the filters.

3.4 DISPOSAL OF ASBESTOS-CONTAINING MATERIALS AND ASBESTOS-CONTAMINATED WASTE:

A. Removal from Work area:

1. **General:** As the Work progresses, and to prevent exceeding available storage capacity on site, remove sealed and labeled containers of asbestos waste and dispose of such containers at an authorized disposal site in accordance with the requirements of disposal authority.
2. **Double bagging or containerization:** Bags of asbestos materials removed from the Work area via the equipment decontamination enclosure shall be placed in a mechanically fastened drum or a second clean bag which is then transported in an enclosed vehicle. Appropriate labels shall be affixed to the outside of the container.
3. **Cleaning:** The drums or bags shall be cleaned in the equipment decontamination enclosure as previously described and placed in the transport vehicle. A fully enclosed plastic tunnel shall be provided when loading material contained in double plastic bags. The tunnel shall connect the equipment decontamination enclosure and the transport vehicle.
4. **Respiratory Protection:** Respiratory protection will be required in loading asbestos materials.
5. **On-site storage of waste:** On-site storage of waste will not be permitted for more than 5 working days after completion of last phase or nor more than 30 days per phase, whichever is less.
6. **Wastewater:** All wastewater shall be filtered through a five-micron filter prior to final disposal in a sanitary sewer. In the absence of a sanitary sewer system, the wastewater shall be drummed and transported to a landfill per the previous requirements for disposal.
7. **Other Waste:** Asbestos waste other than contaminated water shall be drummed or bagged and transported as previously described.

B. Transporting waste:

1. **Permits:** Local, state, and federal permits shall be obtained for the transportation of asbestos materials, and all procedures shall be followed as they pertain to transportation of asbestos materials.
2. **Notification of Transport:** Notify the Owner's consultant **48 hours in advance** of the time when contaminated materials are to be removed from the site.
3. **Transport Vehicle:** Transport vehicle shall be lined with 6-mil plastic prior to loading asbestos waste. The vehicle shall be used for the sole purpose of transporting asbestos waste. No other contract materials or supplies shall be stored or transported in the vehicle unless it has been decontaminated.
4. **Documentation:** Activities involving removal of waste, loading onto vehicle, and disposal at the landfill, shall be documented in daily reports. A second document, landfill manifest, shall be completed when material is disposed at landfill. Both

documents shall indicate date and volume of material handled. A bill of lading shall be submitted as per DOT regulations.

- a. It shall be the responsibility of the Contractor to notify the Owner or Owner's Consultant and coordinated having the Hazardous Waste Manifest or Non-Hazardous Waste Manifest properly signed by Owner or Owner's representative. Contractor shall give the Owner or Owner's Representative or Consultant 48 hours notice prior to request for signature and waste pick-up.
- b. Contractor SHALL NOT sign any Hazardous Waste Manifest for the Owner.

5. **Respiratory Protection:** Respiratory protection will be required in unloading asbestos materials.

6. **Safety:** Contractor shall be responsible for safe handling and transportation of hazardous waste generated by this Contract to the designated Hazardous Waste Site.

C. **Hazardous Materials Spills:** Contractor shall hold the Owner and Owner's consultant harmless for claims, damages, losses, and expenses, including attorney's fees arising out of or resulting from, asbestos spills on the site or spills enroute to the disposal site.

3.5 **REESTABLISHMENT OF OBJECTS AND SYSTEMS:**

A. **Relocation of Moveable Objects:** Relocate objects moved to temporary locations in the course of the Work to their proper positions. Only clean objects are to be moved into the areas.

B. **Remounting Objects:** Remount objects removed in the course of the Work in their former positions. Repair any moveable or fixed objects damaged during the course of the Work.

C. **Systems reestablishment:** Reestablish HVAC, mechanical, and electrical systems in proper working order.

1. Install new HVAC filters and dispose of used filters as contaminated waste.

D. **Building repair/repaint:** Repair any damage to building, or building systems (electrical, mechanical, plumbing, etc.) which was not noted in writing prior to work area preparation.

1. Repaint any areas damaged during the course of the Work unless this work is scheduled to be repaired by others. See paragraph 1.2.C, Related Work Specified Elsewhere, of this section. Quality of paint and workmanship shall be consistent with that found within the building prior to this Project, unless otherwise stated. Refer to Section 09900 Painting.

END OF SECTION

CERTIFICATE OF VISUAL INSPECTION

BUILDING
NAME/NUMBER: _____

CONTAINMENT AREA
DESCRIPTION: _____

In accordance with Section 02071HM, Part 3.3, Project Clean-up and Inspection the Contractor hereby certifies that he or she has visually inspected the Work Area (all surfaces including ledges, walls, ceiling, floor wherein asbestos-containing materials resided) all asbestos-containing materials scheduled for removal have been removed and has found no visible evidence of those materials or its debris remaining.

By: _____ Date: _____
(SIGNATURE)

(PRINT NAME)

(PRINT TITLE)

PROJECT ADMINISTRATOR CERTIFICATION

The Project Administrator hereby certifies that he or she has accompanied the Contractor on his visual inspection and verifies that this inspection has been thorough and to the best of his or her knowledge and belief, the Contractor's Certification above is a true and honest one.

By: _____ Date: _____
(SIGNATURE)

(PRINT NAME)

(PRINT TITLE)

SECTION 02075HM

FLOOR TILE WITH MASTIC (Non-Mechanical Methods)

PART 1 - GENERAL

1.1 **SCOPE:**

This Specification is a supplement to Section 02071HM and covers the abatement of asbestos-containing floor tile and/or mastic from the following locations:

As described in Section 01010HM, Scope of Work.

1.2 **DESCRIPTION OF WORK:**

- A. **General:** The Work specified herein shall be the removal of asbestos-containing material by persons knowledgeable, qualified, and trained in the removal, treatment, handling, and disposal of asbestos-containing material, and the subsequent cleaning of the affected environment, and who comply with Federal and State regulations which mandate work practices, and who are capable of performing the Work of this Contract.
- B. **Contract Fulfillment:** The Contractor shall supply all labor, materials, equipment, services, insurance, and incidentals which are necessary or required to perform the Work in accordance with applicable governmental regulations and these Specifications.
- C. **Related Work Specified Elsewhere:** For related work see Section 01010HM, Scope of Work.

1.3 **TERMINOLOGY:**

The following terms used in these Specifications are defined in Section 02071HM.

1.4 **APPLICABLE DOCUMENTS:**

See Section 02071HM, Part 1.4, for Applicable Documents.

1.5 **SUBMITTALS AND NOTICES:**

See Section 02071HM, Part 1.5, for Submittals and Notices.

1.6 PERSONAL PROTECTION AND SAFETY:

Section 02071HM, Part 1.6, Personal Protection and Safety, shall be modified in the following particulars only.

A. Respiratory protection requirements:

1. All activities may be performed wearing a 1/2-face, negative-pressure respirator. If it becomes necessary to use powered air-purifying respirator (PAPR) protection, the respiratory protection requirements of Section 02071HM shall govern.

B. Worker protection procedures:

1. Each worker and authorized visitor shall, upon entering the job site: remove street clothes in the Change Room and put on a respirator and clean protective clothing before entering the Work area. Each person will don 2 protective clothing suits prior to entering the work area.
2. All workers and authorized visitors shall, each time they leave the Work area; remove gross contamination from protective clothing, HEPA vacuum clothing, and remove the outer protective suit and place within a waste bag located within the work area. Each person will then proceed immediately to the shower room and remove the second inner, disposable suit. After wet wiping all exposed body and equipment surfaces, workers and/or visitors may then proceed through the exit to the uncontaminated area.

1.7 SUPERINTENDENT FOREMAN, CRAFTSMAN:

The Contractor shall have a job Superintendent (and/or Competent person) present at all times while work on this Contract is in progress.

The Project Superintendent (and/or Competent person) shall be thoroughly familiar and experienced with asbestos removal and related work and shall be familiar with and shall enforce the use of all safety procedures and equipment. He or she shall be knowledgeable of all EPA, OSHA, and NIOSH requirements and guidelines.

In addition to the Superintendent (and/or Competent person), the Contractor shall furnish one or more foremen who are familiar and experienced with asbestos removal and its related work, safety procedures, and equipment. If the Superintendent is not present, then the foremen shall be a Competent person.

- A. It shall be a requirement of this Contract that the Superintendent and/or one or more of the Contractor's foremen be inside the Work area at all times while work is in progress.
- B. It is the intent of these Specifications that all phases of the Work shall be executed by skilled craftsmen experienced or receiving training by on-site experienced personnel in each respective trade.

- C. It is the intent of these Specifications that all phases of the Work shall be executed by skilled craftsmen experienced or receiving training by on-site experienced personnel in each respective trade.
- D. The Competent person on-site must be able to clearly communicate in a manner so that the Owner's Consultant and Owner can clearly understand.

PART 2 - MATERIAL AND EQUIPMENT

2.1 MATERIALS:

Section 02071HM, Part 2.1, Materials, shall be modified in the following particulars only.

A. Mastic remover solvent requirements:

1. Only solvents approved by the Owner or Engineer/Architect will be used.
2. All solvents will be water soluble, low-odor, and follow the manufacturers guidelines for usage, clean up, and disposal.
3. Contractor will ensure that all codes and regulations regarding the use of said solvents are complied with.

B. Encapsulant requirements:

1. Only encapsulants approved by the Owner or Engineer/Architect will be used.
2. Contractor will follow the manufacture's guidelines and recommendations for application and usage.
3. If encapsulants are to be applied prior to new flooring installation, Contractor will ensure the compatibility of said encapsulant with all flooring materials installed.

2.2 TOOLS & EQUIPMENT

Section 02071HM, Part 2.2, Tools & Equipment, shall be modified in the following particulars only.

A. Pressure recorder:

1. Only visible signs of negative air will be required.

PART 3 - EXECUTION

3.1 **PREPARATION:**

Section 02071HM, Part 3.1, Preparation, shall be modified in the following particulars only.

A. Prepare the Work area:

1. Cover all criticals (doors, windows, vents, etc.) with 2 layers of 6-mil plastic affixed with sufficient tape to prevent air intrusion.
2. Install 1 layer of plastic over bottom half of all walls within the Work area (splashguards). Splashguards shall consist of 6-mil plastic, which extends from the floor of the wall to four feet in height above the floor. Plastic will be secured with tape at all edges. Contractor will ensure that tape does not damage wall finishes.
3. Reduced pressure within the Work area will be maintained by negative air HEPA machines and be exhausted to outside air.
4. Soak the Work area floor with amended water. Provide sufficient water to delaminate flooring, but restrict quantities to prevent damage to other parts of the building.

B. Decontamination Facilities:

1. The decontamination enclosure facility will be constructed of two totally enclosed chambers as follows:
 - a. An equipment room, constituting an air lock, with an access doorway to a designated area of the Work area and an access doorway to the shower area.
 - b. A washroom, constituting an air lock, with an access doorway to the equipment room and an access doorway to an uncontaminated area.
 - c. All floors of the decontamination chamber will be covered with two layers of six-mil plastic. Flooring plastic will extend up 12-inches along the decontamination walls. Flooring will be seamless in its application.
2. All decontamination systems or entry/exit system air locks will be constructed using Z-flap design incorporating 2 layers of 6-mil plastic with the flaps extending the full height and width of the entrance space.
3. Ensure that a water source within the shower room is available for wet wiping of all exposed extremities and respirator prior to exiting the decontamination facility. All protective gear will be removed and be disposed of in the equipment room prior to entering the shower room.

3.2 REMOVAL AND DISPOSAL OF ASBESTOS-CONTAINING FLOOR TILES AND/OR MASTIC:

Section 02071HM, Part 3.2, Asbestos Removal, shall be modified in the following particulars only.

A. Removal:

1. Workers shall perform the removal while wearing full body protective clothing and at a minimum - 1/2 face negative pressure respirators as previously specified.
2. Wetting of the floor covering shall continue during removal. Tiles shall be removed intact to the furthest extent practicable.
3. If mastic contains asbestos, remove according to Owner consultant's directives using hand-held blade scrappers or by wet sanding if amended water is ineffective. If hand-held blade scrappers are used, mastic must be kept wet at all times.
4. If mastic-removing solvents are allowed, remove by dissolving and wet mopping. Solvent must not be allowed to dry and must be removed by end of each shift. After clean up of all solvent/mastic residue, the Work area must be thoroughly wet mopped with amended water. A final mopping will be required with clean water and clean mop heads.
5. Rotating blade buffing machines are allowed only during solvent or amended water use. Mastic must be kept wet at all times during machine usage.
6. If mastic is to be removed, Contractor will ensure that no visible mastic residue exits.

3.3 CLEANUP AND AIR MONITORING:

Section 02071HM, Part 3.3, Cleanup and Air Monitoring, shall be modified in the following particulars only.

A. Air Monitoring:

If, during removal, personal or area airborne fiber counts exceed 0.1 fibers per cubic centimeter (f/cc), the Contractor shall seal off and prepare the Work area and shall provide differential air pressure as previously specified.

Workers continuing the removal shall then be provided with Powered air-purifying respirators (PAPR) and full-body protective clothing.

The Contractor shall be responsible for all personal air monitoring and shall provide the results of the air monitoring on a weekly basis to the Owner's consultant. These results shall be for each job title and shall not contain an individual's name or social security number.

B. Clean-Up:

1. If the flooring substrate is concrete and the mastic contains asbestos, the substrate will be considered free of contaminated material when that surface is two-dimensional in character and contains no surface build-up of residual material.
2. If the flooring substrate is wood and the mastic contains asbestos, the substrate will be scraped in a sufficient manner for future application of mastic. The degree of thoroughness of scraping will be left to the discretion of the Owner, Owner's representative, or Prime. If no additional flooring will be installed over the cleaned surface, the substrate will be encapsulated.
3. Encapsulants will only be applied at the request of the Owner, Owner's consultant, or Prime and must be compatible with all flooring materials to install.
4. All materials shall be double-bagged in non-hazardous, clear 6-mil plastic bags. Bags shall be labeled per current regulatory requirements.

3.4 DISPOSAL OF ASBESTOS-CONTAINING MATERIALS AND ASBESTOS-CONTAMINATED WASTE:

Section 02071HM, Part 3.4, Asbestos-Containing Materials and Asbestos-Contaminated Waste, shall be modified in the following particulars only.

A. Asbestos Materials:

1. All materials shall be disposed of as non-hazardous asbestos containing materials.

3.5 REESTABLISHMENT OF OBJECTS AND SYSTEMS:

See Section 02071HM, Part 3.5 for Reestablishment of Objects and Systems.

END OF SECTION

SECTION 02075AHM

FLOOR TILE WITH MASTIC (mechanical methods)

PART 1 - GENERAL

1.1 **SCOPE:**

This Specification is a supplement to Section 02071HM and covers the abatement of asbestos-containing floor tile and/or mastic from the following locations:

As described in Section 01010HM, Scope of Work.

1.2 **DESCRIPTION OF WORK:**

A. **General:** The Work specified herein shall be the removal of asbestos-containing material by persons knowledgeable, qualified, and trained in the removal, treatment, handling, and disposal of asbestos-containing material, and the subsequent cleaning of the affected environment, and who comply with Federal, State, and Local regulations which mandate work practices, and who are capable of performing the Work of this Contract.

B. **Contract Fulfillment:** The Contractor shall supply all labor, materials, equipment, services, insurance, and incidentals which are necessary or required to perform the Work in accordance with applicable governmental regulations and these Specifications.

C. **Related Work Specified Elsewhere:**

Section 02071HM, Asbestos Removal
Section 09900, Painting

1.3 **TERMINOLOGY:**

The following terms used in these Specifications are defined in Section 02071HM, Part 1.3.

1.4 **APPLICABLE DOCUMENTS:**

See Section 02071HM, Part 1.4, for Applicable Documents.

1.5 **SUBMITTALS AND NOTICES:**

See Section 02071HM, Part 1.5 for Submittals and Notices.

1.6 **PERSONAL PROTECTION AND SAFETY:**

Section 02071HM, Part 1.6, Personal Protection and Safety, applies but shall be modified in the following particulars only.

A. **Respiratory protection requirements:**

1. All activities may be performed wearing **powered air purifying respirators (PAPR)**. If it becomes necessary to use Type "C" respirator protection, the respiratory protection requirements of Section 02071HM shall govern.

B. **Worker protection procedures:**

Each worker and authorized visitor shall, upon entering the job site: remove street clothes in the Change Room and put on a respirator and clean protective clothing before entering the Work area. Each person will don protective clothing prior to entering the work area.

All workers and authorized visitors shall, each time they leave the Work area; remove gross contamination from protective clothing, HEPA vacuum clothing, and then don a second disposable suit over the first. Workers and/or visitors shall then proceed to the Decontamination area provided by the Contractor. Decontamination procedures are described in Section 02071HM 1.6.J.

1.7 **SUPERINTENDENT FOREMAN, CRAFTSMAN:**

The Contractor shall have a job superintendent (and/or Competent person) present at all times while work on this Contract is in progress.

The Project Superintendent (and/or Competent person) shall be thoroughly familiar and experienced with asbestos removal and related work and shall be familiar with and shall enforce the use of all safety procedures and equipment. He or she shall be knowledgeable of all EPA, OSHA, and NIOSH requirements and guidelines.

In addition to the Superintendent (and/or Competent person), the Contractor shall furnish one or more foremen who are familiar and experienced with asbestos removal and its related work, safety procedures, and equipment. If the Superintendent is not present then the foremen shall be a Competent person.

- A. It shall be a requirement of this Contract that the superintendent and/or one or more of the Contractor's foremen be inside the Work area at all times while work is in progress.
- B. It is the intent of these Specifications that all phases of the Work shall be executed by skilled craftsmen experienced or receiving training by on-site experienced personnel in each respective trade.
- C. The Competent person on-site must be able to clearly communicate in a manner so that the Owner's Consultant and Owner can clearly understand.

PART 2 - MATERIAL AND EQUIPMENT

2.1 MATERIALS:

Section 02071HM, Part 2.1, Materials, applies but shall be modified in the following particulars only.

A. Mastic remover solvent requirements:

1. Only solvents approved by the Owner or Engineer/Architect will be used.
2. All solvents will be water soluble, low-odor, and follow the manufacturers guidelines for usage, clean up, and disposal.
3. Contractor will ensure that all codes and regulations regarding the use of said solvents are complied with.

B. Encapsulant requirements:

1. Only encapsulants approved by the Owner or Engineer/Architect will be used.
2. Contractor will follow the manufactures guidelines and recommendations for application and usage.
3. If encapsulants are to be applied prior to new flooring installation, Contractor will ensure the compatibility of said encapsulant with all flooring materials installed.

2.2 TOOLS & EQUIPMENT

Section 02071HM, Part 2.2, Tools & Equipment, applies but shall be modified in the following particulars only.

- A. If Bead Blasting equipment is to be used, equipment must be HEPA filtered.

PART 3 - EXECUTION

3.1 PREPARATION:

Section 02071HM, Part 3.1, Preparation, applies but shall be modified in the following particulars only.

A. Prepare the Work area:

1. Prepare the Work area in accordance to Section 02071HM. Work area floor will not be covered with plastic.
2. Soak the Work area floor with amended water. Provide sufficient water to delaminate flooring, but restrict quantities to prevent damage to other parts of the building.

B. Decontamination Facilities:

Decontamination facilities will conform to Section 02071HM, Part 3.1, D.

3.2 REMOVAL:

Section 02071HM, Part 3.2, Removal, applies but shall be modified in the following particulars only.

- A. Workers shall perform the removal while wearing full body protective clothing and – at a minimum – powered air-purifying respirators (PAPR)
- B. Wetting of the floor covering shall continue during all phases of tile removal.
- C. If bead blasting equipment is used and mastic contains asbestos, air will be misting during all phases of mastic removal.
- D. If mastic-removing solvents are allowed, remove by dissolving and wet mopping. Solvent must not be allowed to dry and must be removed by end of each shift. After clean up of all solvent/mastic residue, the Work area must be thoroughly wet mopped with amended water. A final mopping will be required with clean water and clean mop heads.
- E. Rotating blade buffing machines are allowed only during solvent or amended water use. Mastic must be kept wet at all times during machine usage.
- F. If mastic is to be removed, Contractor will ensure that no visible mastic, residue exits.

3.3 CLEANUP AND AIR MONITORING:

Section 02071HM, Part 3.3, Cleanup and Air Monitoring, applies but shall be modified in the following particulars only.

- A. If the flooring substrate is concrete and the mastic contains asbestos, the substrate will be considered free of contaminated material when that surface is two-dimensional in character and contains no surface build-up of residual material.
- B. If the flooring substrate is wood and the mastic contains asbestos, the substrate will be scraped in a sufficient manner for future application of mastic. The degree of

thoroughness of scrapping will be left to the discretion of the Owner, Owner's representative, or Prime. If no additional flooring will be installed over the cleaned surface, the substrate will be encapsulated.

- C. Encapsulants will only be applied at the request of the Owner, Owner's consultant, or Prime and must be compatible with all flooring materials to install.
- D. All materials shall be double-bagged in non-hazardous, clear 6-mil plastic bags.
- E. If, during removal, personal or area airborne fiber counts exceed 1.0 f/cc, the Contractor shall prepare the Work area for Type "C" usage.
- F. Workers continuing the removal shall then be provided with Type "C" pressure demand respirators and full-body protective clothing.
- G. The Contractor shall be responsible for all personal air monitoring and shall provide the results of the air monitoring on a weekly basis to the Owner's consultant. These results shall be for each job title and shall not contain an individual's name or social security number.

3.4 DISPOSAL OF ASBESTOS-CONTAINING MATERIALS AND ASBESTOS-CONTAMINATED WASTE:

Section 02071HM, Part 3.3, Disposal of Asbestos-Containing Materials and Asbestos-Contaminated Waste, applies but shall be modified in the following particulars only.

A. Asbestos Waste:

- 1. All materials, except those resulting from Bead Blasting, shall be disposed of as non-hazardous asbestos containing materials.
- 2. All mastic removed from Bead Blasting shall be disposed of as hazardous waste

3.5 REESTABLISHMENT OF OBJECTS AND SYSTEMS:

See Section 02071HM, Part 3.5 for Reestablishment of Objects and Systems.

END OF SECTION

SECTION 02080HM

AIR CLEARANCE TESTING VIA TEM

PART 1 - GENERAL

1.1 SCOPE:

This Specification covers the method for determining that the abatement of Asbestos-containing materials has been completed.

- A. After October 7, 1990, Transmission Electron Microscopy (TEM) is required when more than 160 S.F. or 260 L.F. of ACBM is to be removed.
- B. Glovebag removals in excess of the limits specified in A, above, are not exempt from TEM requirements.
- C. To determine the amount of ACBM affected under Paragraphs A, above, add the total square or linear footage of ACBM within the containment barriers used to isolate the functional space. Contiguous portions of material subject to removal conducted concurrently or at approximately the same time within the same school building shall not be separated to qualify under Paragraphs A, above.

This Section, 02080HM, is intended to supplement, not replace Section 02071HM, Asbestos Removal. All of the provisions of Section 02071HM apply. More specifically, this Section applies to Article 3.3 of Section 02071HM, CLEANUP AND AIR MONITORING.

1.2 DESCRIPTION OF THE WORK:

- A. **General:** The Work specified herein shall be the preparation of the Work area for final air clearance testing via Transmission Electron Microscopy (TEM) following the removal of Asbestos-containing materials from the Work area.
- B. **Contract Fulfillment:** The Contractor shall supply all labor, materials, equipment, services, insurance, and incidentals by persons knowledgeable, qualified, and trained which are necessary to prepare the Work area for testing, as well as for any necessary retesting which may be required. Testing will be performed by the Owner's selected testing agency in accordance with Section 01410HM, Testing Laboratory Services.
- C. **Related Work specified elsewhere:**

See Section 01010HM, Scope of Work, for related work

1.3 **TERMINOLOGY:**

The following terms used in these Specifications are defined as listed below:

- A. **Aggressive Sampling:** A process that is designed to dislodge and/or resuspend any settled fibers and to keep them airborne during the sampling period.
- B. **Asbestiform:** A specific type of mineral fibrosity in which the fibers and fibrils possess high tensile strength and flexibility.
- C. **Asbestos:** The asbestiform varieties of chrysotile (serpentine), crocidolite (riebeckite), amosite (cummingtonite/ grunerite), anthophyllite, tremolite, and actinolite.
- D. **Aspect ratio:** A ratio of the length to the width of a particle. Minimum aspect ratio as defined by the analytical technique utilized is equal to or greater than 5:1.
- E. **Bundle:** A structure composed of three or more fibers in a parallel arrangement with each fiber closer than one fiber diameter.
- F. **Cluster:** A structure with fibers in a random arrangement such that all fibers are intermixed and no single fiber is isolated from the group. Groupings must have more than two intersections.
- G. **Fiber:** A structure greater than or equal to 0.5 mm in length with an aspect ratio (length to width) of 5:1 or greater and having substantially parallel sides.
- H. **Intersection:** Nonparallel touching or crossing of fibers, with the projection having an aspect ratio of 5:1 or greater.
- I. **Matrix:** Fiber or fibers with one end free and the other end embedded in or hidden by a particulate. The exposed fiber must meet the fiber definition.
- J. **Structure:** A microscopic bundle, cluster, fiber, or matrix which may contain asbestos.
- K. **TEM:** Transmission electron microscopy.

1.4 **APPLICABLE DOCUMENTS:**

The current issue of each document shall govern. Where conflict among requirements or with these Specifications exists, the more stringent of these requirements shall apply.

- A. Title 40, Code of Federal Regulations, Part 763, Subpart E; Asbestos-Containing Materials in Schools; U.S. Environmental Protection Agency (EPA).
- B. All federal, state, county, and city codes and ordinances as applicable.

1.5 **SUBMITTALS AND NOTICES:**

After all preparations for the final air test in the Work area have been performed (Refer to Steps A through F of Article 3.3, CLEANUP AND AIR MONITORING of Section 02071HM, Asbestos Removal), the Contractor shall request the Engineer in writing to perform the final visual inspection and air clearance testing. Air clearance testing shall not commence until successful completion of the visual inspection.

PART 2 - MATERIALS AND EQUIPMENT

2.1 **MATERIALS:**

No new materials are required under this Section.

2.2 **TOOLS AND EQUIPMENT:**

The requirements of Article 2.2, TOOLS AND EQUIPMENT of Section 02071HM, Asbestos Removal applies. The Contractor is responsible for supplying the required leaf blower and fans and ensuring that they are clean prior to use in aggressive sampling.

PART 3 - EXECUTION

3.1 **PREPARATION:**

A. **General:** Upon receipt of the Contractor's request that the final visual inspection and air clearance testing be performed, the Owner's consultant will conduct a thorough visual inspection. Upon successful completion of the visual inspection, the clearance testing will be performed.

B. **Providing Equipment and Supplies:** The Contractor shall supply the Owner's consultant with a one horsepower electric leaf blower and one 20 inch box fan per 10,000 cubic feet of work area volume.

The Contractor shall be responsible for providing clean equipment in good working order and adequate electrical supply for uniform distribution of the equipment throughout the Work area.

C. **Negative air units:** Shall remain in continuous operation until testing results indicate that the specified fiber clearance level has been achieved.

1. During the cleaning, removal, and testing activities, operate negative air units in sufficient capacity to provide one air exchange within the room every 15 minutes. Close doors and windows and locate units such that fiber migration to other parts of the building cannot occur.

- D. **Glovebags or Mini-enclosures:** In areas where only glovebag removals or removals within mini-enclosures are performed, the entire room(s) where such removals take place shall be cleaned prior to removal in accordance with the following procedures:
1. HEPA-vacuum or steam clean all carpets.
 2. HEPA-vacuum and wet clean all floors, all other horizontal surfaces, and surfaces where visible contamination exists.
 3. Dispose of all debris, filters, mopheads, and cloths in sealed, leak-tight containers.

3.2 **SAMPLING, ANALYSIS, AND INTERPRETATION OF RESULTS:**

- A. **Protocols:** Sampling, analysis, and interpretation of results will be performed in accordance with EPA 40 CFR 763, Subpart E, Appendix A, Interim Transmission Electron Microscopy Analytical Methods — Mandatory and Nonmandatory — and Mandatory Section to Determine Completion of Response Actions except that the nonmandatory provisions may be waived at the discretion of the Engineer.
- B. **Aggressive Sampling:** For fully contained Work areas and in areas where removals have only been performed within glovebags or mini-enclosures, aggressive sampling techniques will be used during the final clearance sampling.
- C. **Sample Volume:** The minimum sample volume collected will be 1,199 liters for 25 & 45 mm filters and 2,799 liters for 37 mm filters. A minimum of 13 samples will be collected for each testing site consisting of the following:
1. A minimum of five samples within the Work area.
 2. A minimum of five samples outside the Work area positioned at locations representative of the air entering the Work area.
 3. A minimum of two field blanks will be taken by removing the cap of the filter cassette for not more than 30 seconds immediately prior to the sampling in Steps 1 and 2 at the following places:
 - a. Near the entrance to the Work area.
 - b. At one of the ambient sites outside the Work area where sampling in Step 2 is to be performed.
 4. A sealed blank which has not been opened in the field will be submitted with each set of samples.
- D. **Additional Sample Analysis:** Initially, only the five samples collected from the Work area will be analyzed. If the arithmetic mean of their asbestos structure concentrations per square millimeter is less than or equal to 70 structures per square millimeter, the asbestos removal and cleanup activities within the Work area will be deemed to have been completed. If the arithmetic mean of their structure concentrations per square

millimeter is greater than 70 structures per square millimeter, the three blank filters will be analyzed.

- E. **Termination of Analysis:** If the arithmetic mean concentration of structures per square millimeter on the blank filters is greater than 70 structures per square millimeter, the analysis will be terminated. The Owner's consultant will identify and correct the source of blank contamination and collect a new set of samples.
- F. **Z-test:** If the arithmetic mean of the structure concentrations of the five Work area samples exceeds 70 structures per square millimeter, and if the arithmetic mean of the structure concentrations of the blank samples is less than 70 structures per square millimeter, the remaining five samples will be analyzed and the Z-test calculation will be performed. If the Z-statistic is less than or equal to 1.65, the asbestos removal and cleanup activities within the Work area will be deemed to have been completed. If the Z-test statistic exceeds 1.65, the Contractor shall reclean the Work area and the sampling process as specified herein shall be repeated.

3.3 DISPOSAL OF WASTES AND REESTABLISHMENT OF OBJECTS AND SYSTEMS:

When air clearance testing results indicate that airborne asbestos fiber levels are below the specified limits, the Contractor shall dispose of all remaining asbestos-containing materials and asbestos-contaminated wastes and restore the Work area to its original condition in accordance with Section 02071HM, Asbestos Removal.

3.4 CONTRACT TIME:

When scheduling the Project, the Contractor shall allot a minimum of **24** hours for each round of final air clearance testing and analysis after successful completion of the visual inspection specified in Paragraph 3.3G of Section 02071HM, Asbestos Removal for each Work area. This time is considered to be a part of the Work and does not affect the completion date as indicated in the Agreement between Owner and Contractor.

3.5 RETESTING:

All time required for retesting resulting from the Contractor's failure to achieve final air clearance is also included in the Contractor's Contract Time. The provisions of Paragraph 3.3I of Section 02071HM, Asbestos Removal applies. In the event that retesting is required, the Contract amount will be reduced for additional consultant's time and at the rate of **\$150.00** per additional sample required to be analyzed by TEM. Additional consultant's time shall be additional visual inspection, clearance sampling and lab delivery time.

END OF SECTION

SECTION 02092HM

LBP, LEAD CONTAINING MATERIALS REMOVAL (Abrasive, Ceramic Tile)

PART 1 - GENERAL

1.1 **SCOPE:**

This Specification covers the abatement of materials containing lead-based paint as described in Section 01010HM, Scope of Work.

1.2 **DESCRIPTION OF WORK:**

- A. **General:** The Work specified herein shall be the removal of lead-containing materials and lead dust environments by persons knowledgeable, qualified, and trained in the removal, treatment, handling, and disposal of lead-based paint and lead containing materials, and the subsequent cleaning of the affected environment, and who comply with Federal, State, and Local regulations and guidelines which mandate work practices, and who are capable of performing the Work of this Contract.
- B. **Contract Fulfillment:** The Contractor shall supply all labor, materials, equipment, services, insurance, and incidentals which are necessary or required to perform the Work in accordance with applicable governmental regulations and guidelines and these Specifications.

1.3 **TERMINOLOGY:**

The following terms used in these Specifications are defined as listed below:

- A. **Abatement:** Any measure designed to permanently eliminate lead-based paint hazards in accordance with standard established by EPA Administrator pursuant to Title IV of the Toxic Substances Control Act (TSCA).
- B. **Abatement Area:** The exterior of the building or an area isolated from the building interior by containment.
- C. **Accessible Surface:** Any surface, which is below 5 feet in height from the floor or ground or is exposed in such a way that a child could come in contact with the surface.
- D. **Access Doorway:** A device to allow ingress and egress from one room or area to another while permitting minimal air movement between the rooms, typically constructed by placing two or three overlapping sheets of plastic over an existing or temporarily framed doorway, securing each along the top of the doorway, securing the vertical edge of one sheet along one vertical side of the doorway, and securing the vertical edge of the other sheet along the opposite vertical side of the doorway; or by using a rigid gasketed door and HEPA filter vents.

- E. **Action Level:** An exposure of airborne concentrations of lead dust particulates in excess of thirty micrograms per cubic meter ($30 \mu\text{g}/\text{m}^3$) of air calculated as an 8 hour time weighted average (TWA).
- F. **Air Filtration Equipment:** A portable local filtration system equipped with HEPA filtration and capable of maintaining a constant, low velocity flow to filter and trap contamination out of the air within the work area and then circulate or exhaust the filtered air to uncontaminated areas. This equipment is also used to establish a reduced pressure within the work area.
- G. **Air Monitoring:** The process of measuring the lead content of a specific volume of air in a stated period of time.
- H. **Air 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. This individual shall be certified in the comprehensive practice of air sampling for lead by Department of Health Services (DHS) as a Lead Project Monitor or Lead Supervisor.
- I. **Air Lock:** A system for permitting ingress and egress with minimum air movement between a contaminated area and an uncontaminated area, consisting of dual or triple curtained doorways or rigid gasketed doors separated by a dead air space of four feet.
- J. **Authorized Person or Visitor:** The building owners, his or her authorized representative, or any representative of a regulatory or other agency having jurisdiction over the Project.
- K. **Biological Monitoring:** The analysis of a person's blood to determine the level of lead contamination in the body. Biological monitoring for lead hazard reduction work includes blood sampling and analysis for lead and zinc protoporphyrin levels.
- L. **Certified Industrial Hygienist:** A person certified by American Board of Industrial Hygienist and who has at least four years experience and a graduate degree or five years experience; and who has passed a two-day examination offered by the board (see also industrial hygienist).
- M. **Clean Room:** An uncontaminated area or room which is a part of the Work decontamination facility with provisions for storage of worker's street clothes and protective equipment.
- N. **Clearance Testing:** Post abatement procedure as required by DHS. A clearance inspection must be conducted after abatement is completed. Only a DHS certified lead inspector/assessor or a Project Monitor may conduct a clearance inspection.
- O. **Code Enforcement Agency:** The State Lead Poisoning Prevention Program or its agent, or the local board of health or other agency responsible for enforcing the State Sanitary Code or Sections thereof.

- P. **Commissioner:** The commissioner of Public Health.
- Q. **Common Area:** A room or area that is accessible to more than one tenant in a building (e.g., common hallways, stairwells, laundry rooms).
- R. **Containment:** A process for protecting other workers, residents, and the environment by isolating areas from exposures to lead dust and debris created during abatement in a work area.
- S. **Curtained Doorway:** A device to allow ingress and egress from one room to another while permitting minimal air movement between the rooms, typically constructed by placing two overlapping sheets of plastic over an existing or temporarily framed doorway, securing each along the top of the doorway, securing the vertical edge of one sheet along one vertical side of the doorway, and securing the vertical edge of the other sheet along the opposite vertical side of the doorway (referred to as Z-fold design).
- T. **Decontamination Facility:** A series of connected rooms, with curtained doorways between any two adjacent rooms for the decontamination of workers and of materials and equipment. A decontamination enclosure system always contains at least one airlock.
- U. **Defective surface:** Peeling, flaking, chalking, scaling, or chipping paint; or, paint over crumbling, cracking, or falling plaster, or plaster with holes in it; paint over a defective or deteriorating substrate; paint that is separating from the substrate; and paint that is damaged in any manner such that a child could be exposed to the paint from the damaged area.
- V. **Employee:** Any person employed or hired by an employer in any lawful employment.
- W. **Employer:** Any person, firm, corporation, partnership, association, or other entity engaged in a business or providing services, including the State and any of its political subdivisions, or any person acting in the direct interest of any of the foregoing in relation to any employee or place of employment.
- X. **Encapsulant (sealant):** A liquid material which can be applied to lead containing material and which controls the possible release of lead 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).
- Y. **Encapsulation:** Procedures necessary to apply an encapsulant to lead containing building materials to control the possible release of lead dust particulates or entrained material into the ambient air.
- Z. **Enclosure:** Procedures necessary to enclose completely lead containing material behind airtight, impermeable, permanent barriers.
- AA. **Entity:** Any person, partnership, firm, association, corporation, sole proprietorship, or any other business concern, state or local government agency or political subdivision or authority thereof, or any religious, social, or union organization, whether operated for profit or otherwise.

- BB. **Equipment Room:** A contaminated area or room, which is part of the Worker decontamination enclosure with provisions for storage of contaminated clothing and equipment.
- CC. **Equipment Decontamination Facility:** That portion of a decontamination facility designed for controlled transfer of materials and equipment, typically consisting of a washroom and a holding area.
- DD. **Equipment Room:** A contaminated area or room which is part of the worker decontamination facility with provisions for storage of contaminated clothing and equipment.
- EE. **Fixed Object:** A unit of equipment or furniture in the Work area which cannot be removed from the Work area.
- FF. **General Trades Contractor:** Shall refer to the contractor responsible for coordination of all filed sub-bids and general construction.
- GG. **Hazardous Level of Lead for Waste Disposal:** 5.0 parts per million (ppm) as defined by RCRA Toxicity Characteristic Leachate Procedure (TLCP) or other requirements set by local or state authorities.
- HH. **High Phosphate Detergent:** Detergent that contains at least five percent (5%) tri-sodium phosphate (TSP) or other equally effective cleaning agent.
- II. **HEPA Filter:** A high efficiency particulate air (HEPA) filter capable of trapping and retaining 99.97 percent of particles greater than 0.3 micrometers in mass median aerodynamic equivalent diameter.
- JJ. **HEPA Vacuum Equipment:** Vacuuming equipment with a HEPA filter system.
- KK. **Holding Area:** A chamber in the equipment decontamination facility located between the washroom and an uncontaminated area. The holding area comprises an airlock.
- LL. **Intact Surface:** A defect-free surface with no loose, peeling, chipping, or flaking paint. Painted surfaces must be free from crumbling, cracking, falling plaster, and must not have holes in them. Intact surfaces are not damaged in any way.
- MM. **Log Book:** A notebook or other book containing essential project data and daily project information and a daily project diary. This book is kept on the Project site at all times.
- NN. **Lead-based:** Refers to paints, glazes, and other surface coverings containing a toxic level of lead.
- OO. **Lead-Containing:** Refers to Paints, glazes, and other surface covering containing a detectable level of lead.

- PP. **Mini-Enclosure:** A method with limited applications for removing small amounts of lead-based paint material typical for small-scale, short duration type projects.
- QQ. **Movable Object:** A unit of equipment or furniture in the Work area that can be removed from the Work area.
- RR. **Negative Air Pressure Equipment:** A portable local exhaust system equipped with HEPA filtration and capable of maintaining a constant, low velocity air flow into contaminated areas from adjacent uncontaminated areas.
- SS. **Paint Removal:** All herein specified procedures necessary to remove or strip lead-based paint from the surfaces of components and to dispose of these materials at an acceptable site. Removal may consist of off-site or on-site paint removal as specified.
- TT. **Permissible Exposure Limit:** An airborne lead concentration of fifty micrograms per cubic meter of air ($50 \mu\text{g}/\text{m}^3$) or greater, averaged over an 8 hour period.
- UU. **Personal Monitoring:** Sampling of lead fiber concentrations within the breathing zone of a lead Worker.
- VV. **Plasticize:** To cover floor and walls with plastic sheeting as herein specified.
- WW. **Qualified Abatement Subcontractor:** A sub-contractor capable of providing a properly trained and equipped work force for abatement work. All employees to perform abatement activities shall have successfully completed a minimum of 24 hours of training in the potential hazards of abating lead-based paint. Abatement contractors must possess the appropriate license or certification from the state or local government.
- XX. **Removal:** A strategy of abatement, which entails the removal of components, such as windows, doors, and trim that contain toxic levels of lead such that new components that are lead free may be installed.
- YY. **Replacement:** A method of abatement that involves removing components that have lead-based paint surfaces and installing new components free of lead-based paint.
- ZZ. **Shower Room:** A room or area in the worker decontamination unit facility with hot and cold or warm running water and suitably arranged for complete showering during decontamination. An alternate site away from the decontamination facility may be used as approved by the Owner's consultant.
- AAA. **Subcontractor:** Shall refer to the Abatement Contractor.
- BBB. **Surfactant:** A chemical wetting agent added to water to improve penetration.
- CCC. **Toxic Characteristic Leachate Procedure (TCLP):** EPA required sample preparation for determine the hazard characteristic of a waste generated at a lead abatement site.
- DDD. **Toxic Level of Lead in Surface Coatings:** 1.0 milligrams or more per square centimeter (mg/cm^2) ($0.7 \text{ mg}/\text{cm}^2$ in Los Angeles County) by XRF methods or 5,000

µg/g (0.5%) by laboratory testing, as defined in HUD Regulation and Lead-Base Paint Poisoning Prevention Act.

- EEE. **Washroom:** An area between the Work area and the holding area in the equipment decontamination area.
- FFF. **Wet Cleaning:** The process of eliminating lead-based paint contamination from building surfaces and objects by using cloths, mops, or other cleaning tools that have been dampened with water, and by afterwards disposing of these cleaning tools as lead contaminated waste.
- GGG. **Wet Wall:** Shall refer to walls which contain plumbing fixtures and/or pipes, including both supply and sanitary lines.
- HHH. **Wipe Sampling:** The process of collecting and analyzing lead material from a specific surface area to determine residual lead levels.
- III. **Work Area:** Designated rooms, spaces, or areas of the Project in which lead-based paint 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 sealed, plasticized, and equipped with a decontamination enclosure system. A non-contained work area is an isolated or controlled-access work area that has not been plasticized nor equipped with a decontamination enclosure system.
- JJJ. **Worker Decontamination Facility:** That portion of a decontamination facility 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.

1.4 **APPLICABLE DOCUMENTS:**

The current issue of each document shall govern. Where conflict among requirements or with these Specifications exists, the more stringent requirements shall apply.

- A. **Regulations:** Comply with all codes, regulations, and references applicable to lead abatement work include but are not limited to the following:
 - 1. All Federal, State, Local, and South Coast Air Quality Management District regulations.
 - 2. American National Standards Institute (ANSI) publications;
 - Z9.2-79 Fundamentals Governing the Design and Operation of Local Exhaust Systems
 - Z87.1-79 Occupational and Educational Eye and Face Protection
 - Z88.2-80 Practices for Respiratory Protection
 - Z89.1-81 Requirements for Protective Headgear for Industrial Workers

- Z41-83 Personal Protection - Protective Footwear
- Z88.6-84 Respiratory Protection Respiratory use Physical Qualifications
for Personnel
3. American Society for Testing and Materials (ASTM) publications;
- D1 331-56 Surface and Interfacial Tensions of Solutions of Surface Active
Agents.
4. Code of Federal Regulations (CFR);
- 29 CFR 1910 General Industry Standard
- 29 CFR 1910.1025 Lead Standard for General Industry
- 29 CFR 1910.134 Respiratory Protection
- 29 CFR 1910.1200 Hazard Communication
- 29 CFR 1910.245 Specifications for Accident Prevention (Signs and
Tags)
- 29 CFR 1926 Construction Industry Standards
- 29 CFR 1926.62 Construction Industry Lead Standard
5. Code of Federal Regulations (CFR) (cont'd);
- 40 CFR Part 261 United States Environmental Protection Agency
Regulations
- 40 CFR Part 745 Residential Property Renovation
- 24 CFR Parts 35-37 HUD Lead-Based Paint Regulations.
6. Compressed Gas Association, Inc.
- G-7.1 Commodity Specification for Air
7. National Fire Protection Association (NFPA)
- No. 70. National Electrical Code
8. UL 586-77 (R1 982) Test Performance of High Efficiency Particulate Air Filter
Units (June 10, 1977, 5th Ed.; Rev. March 12, 1982)
9. National Institute for Occupation Safety and Health (NIOSH)
- N31, 3rd. Ed., Vol. 1, Manual of Analytical Methods, Method 7082.

10. Environmental Protection Agency Documents:

EPA 530-SW-85-007	Lead Waste Management Guidance, May 1985
EPA 560/5-85-024	Guidance for Controlling Lead-Base Paint in Buildings, June 1985
EPA 600/4-85-049	Measuring Airborne Lead Following and Abatement Action, November 1985
EPA 560 OPTS-86.001	A Guide to Respiratory Protection for the Lead Abatement Industry, April 1986

11. California Administrative Code (CAQ):

- Title 8, Article 2.5, Sections 341.6 - 341.14, Registration Lead-Related work
- Title 8, Section 5216, General Industry Safety Orders, Lead Regulations
- Title 8, Section 1532.1, Cal/OSHA Construction Safety Orders, Lead
- Title 8, Section 3203, Cal/OSHA Injury and Illness Prevention Program
- Title 17, Division 1, Chapter 8, Accreditation, Certification, and Work Practices for Lead-Based Paint and Lead Hazards

12. California Administrative Code (CAQ) (cont'd):

- Title 22, Division 4, Minimum Standards for Management of Chapter 30 Hazardous and Extremely Hazardous Waste

13. South Coast Air Quality Management District Regulations

- Rule 1420, Emissions Standard for Lead

14. Los Angeles County Code

- Title 11, Health and Safety, Chapter 11.28, Lead Hazards
- Title 12, Environmental Protection

1.5 SUBMITTALS AND NOTICES:

Prior to commencement of work and/or within the time-frames specified below:

- A. **General:** Requirements are as set forth in the General Conditions and Supplementary Conditions for items required to be submitted under this section.

- B. **Product data:** Shall include manufacturer's product data, specifications, samples and application instructions and other pertinent information as necessary.
- C. **Alternatives:** Product substitution submittal shall be in accordance with the General Conditions and Supplementary Conditions.
- D. **Procedure Plans and Shop Drawings:** Submit to the Owner's consultant Procedure Plans and Shop Drawings and ensure that they are in compliance with this Specification and applicable regulations. Shop Drawings will include: construction of decontamination enclosure systems and/or facilities; isolation of the Work areas; placement of negative air machines and their exhaust, emergency exits, and placements of fire extinguishers and first aid kits.
1. Personnel monitoring procedures in accordance with T8 CCR 1532.1
 2. Phasing of abatement work indicating daily roster of workers for each phase.
 3. Security system warning signs locations in accordance with 29 CFR 1910.245, and T8 CCR 1532.1.
 4. Detailed plans for decontamination facilities, toilets, and systems providing inter-room and work area to outside communication showing connections to existing building.
 5. Standard procedures for protecting workers, visitors, and employees and protection of spaces outside work area from contamination.
 6. Engineering systems exposure control indicating number, location, and capacity of supply and exhaust systems, the expected direction of flow, and the range of expected negative air pressure in each area.
- E. **Qualifications:** Within 10 days from Notice to Proceed, submit the following documents:
1. **License:** Submit copy of current contractor license from the California Contractors State License Board.
 2. **Personnel Training-Superintendent and Foreman:** Submit copy of certificates of completion from a training course in lead abatement project supervision offered by a California accredited educational institution, and a copy of certification from California Department of Public Health (CDPH) as a lead supervisor. Copies of these documents shall be maintained in the Project Logbook. Substitutions may be made by written notice to Owner's consultant.
 3. **Personnel Training-Workers:** Submit copy of certificates of completion from a training course in lead abatement project supervision offered by a California accredited educational institution, and a copy of certification from California Department of Public Health (CDPH) as a lead worker. Copies of these documents shall be maintained in the Project Logbook. Substitutions may be made by written notice to Owner's consultant.

4. **Personal Protection and Exposure Understanding:** Submit documentation to the Owner's consultant indicating that each employee has had instruction on the hazards of lead exposure, on use and fitting of respirator, on protective dress, on use of showers, on entry and exit from work areas, and on all aspects of work procedures and protective measures and understands this instruction.
5. **Respirators:** Submit a written standard operating procedure governing selection, fit-testing, and use of respirators in accordance with 29 CFR 1910, Subpart 1, 29 CFR 1926.1101, CGAI Standard G7.1, ANSI Z88.2, and Z88.6. Also submit manufacturer's certification that the respirators to be used in this project comply with these regulatory requirements.
6. **Medical Examination:** Submit proof that personnel who will be entering contaminated areas have had medical examinations, and furnish the results of said exam to Owner's consultant. Comply with 29 CFR 1910.20 for access to employee exposure and medical records.
 - a. **Exam and History:** Before exposure to lead, provide each employee with a comprehensive medical exam meeting the general definition outlined in California Administration Code Title 8, CCR. No employee shall be allowed to enter the Work Area without having first provided a copy of his or her Medical History to the Owner's Representative.
 - b. **Employee Roster:** Submit an employee roster to Owner's consultant for each Work shift and confirm in writing within 24 hours of commencement of shift. The roster will consist of a list of employees who have received training and medical examinations per paragraphs Part 1.5, E.2, E.3, E.5, and E.6 of this section. A copy of this list is to be maintained in the Project Logbook.

F. Notifications, Permits, Communications and Postings.

1. **Submit copies of notifications to all appropriate Government agencies, including the following:**
 - a. CAL-OSHA (310) 949-7827 Notification shall be in accordance with the Section 341.9 of Title 8 of California Administrative Code.
 - b. Department of Public Health Childhood Lead Poisoning Prevention Program (if applicable - 5 days prior to work).
 - c. Send appropriate form 8551 to the California Department of Public Health within 30 days of completion of abatement (if appropriate).
 - d. Copies of Government agency correspondence shall be included in the submittals.
 - e. Where local police and fire departments have jurisdiction, secure approval of the proposed security and safety plans for the work prior to submittal to Owner's Representative. Contact both departments for the requirements of the approval process.

2. **Proof of Permits, Site Requirements, and Disposal of Waste:** Submit proof satisfactory to the Owner's consultant that all required testing, permits, site location, and arrangements for transport and disposal of lead-coated or contaminated materials, supplies, and the like have been obtained.
3. **Safety Compliance:** In addition to detailed requirements of this Specification, comply with laws, ordinances, rules, and regulations of federal, state, regional, local authorities, and of Owners regarding handling, storing, transporting, and disposing of lead waste materials. Comply with applicable requirements of the current issue of 29 CFR 1910. 29 CFR 1926.62, and 40 CFR 261, 40 CFR. Parts 35, 36, 37, and CAC Section 5208. Submit matters of interpretation of standards to the appropriate administrative agency for resolution before starting Work. Where requirements of this Specification and reference documents vary, the most stringent requirement shall apply.
4. **Availability of Regulatory References:** Contractor shall have at least one copy each of 29 CFR 1910; 29 CFR 1910.134; 29 CFR 1926; 40 CFR Part 261; and CAC, Title 8, Section 5208, at his or her office and also at the job site.
5. **Posting of Caution Signs:** Before the commencement of any Work at the site, post bilingual EPA and CAL-OSHA caution signs in and around the Work Area to comply with EPA and OSHA regulations.
6. **Submit Training and Certifications:** All lead workers assigned to this project must be accredited as a Lead Worker under the California Department of Public Health (CDPH). At least one employee on each shift shall be currently accredited as a Supervisor and shall have successfully completed in the last 12 months a course of instruction meeting the requirement for "Competent Person." At least one employee on each shift shall be currently accredited in accordance to the Environmental Protection Agency's (EPA) Renovation, Repair, and Painting (RRP) regulation. In addition, Hazardous Material Contractor must also be certified as a firm in accordance with the EPA's RRP regulation
7. **Project Logbook Submittals:** Submit front-end documents of Project Logbook. These documents will include copies of the Contractor's Respiratory Protection Program, HUD and OSHA documents, worker decontamination procedures, equipment decontamination procedures, authorized personnel list, format of daily report sheets, test reports on waste materials, and format of waste manifests. The completed daily reports and waste manifests shall be submitted along with pay requests for completed work. Copies of these front-end documents shall be maintained at the site during the lead removal phase of the Project.
 - a. The Superintendent is required to keep the Project Logbook up to date, ensure that all work criteria is followed in the proper sequence, and to fill out the enclosed check list to document the progression of the job. A separate checklist will be required for each individually prepped work area.
8. **Property Condition Assessment:** Owner, Architect/Engineer or Owner's consultant, and Contractor must agree in writing on building and fixture condition prior to commencement of Work. The Contractor shall submit an inventory of all

items removed from the Work area and an inventory of all items remaining in the Work area.

9. **Informing Other Trades:** The lead abatement contractor must inform other employers on site of the nature of the Contractor's work with lead-based paint and the existence of and requirements pertaining to regulated areas. Such notification shall be coordinated with, and approved by, the Owner.
10. **Pressure Strip Recordings:** At the termination of the project, submit copies of all pressure strip chart recordings.

G. **Field Air Sampling:**

Personal monitoring and other monitoring which is required by law or considered necessary by the Contractor for Worker protection shall be the responsibility of the Contractor and performed by Contractor's Air Sampling Professional.

H. **Certifications:**

1. **Equipment Certification:** Submit manufacturer's certification that vacuums, negative air pressure equipment filters, and other local exhaust ventilation equipment conform to ANSI Z9.2, as well as all Federal, State, Local, and SCAQMD regulations (permit to construct).
2. **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 submitted to the Owner's representative or Owner and signed by the rental company.

1.6 **PERSONAL PROTECTION AND SAFETY:**

A. **General:** The Contractor alone shall be responsible for the safety, efficiency, and adequacy of his or her plant, appliances, methods, and for any damages which may result from his or her operations, improper construction practices, or maintenance. He or she shall erect and properly maintain at all times as required by the conditions and progress of the Work, proper safeguards for the protection of workmen and the public and shall post warning signs around the job site.

B. **Personal Protective Equipment:**

1. Provide workers and authorized visitors with sufficient set of protective full body impervious protective clothing. Personal Protective Equipment shall comply with the requirements of 29 CFR 1910, Subpart I., and Title 8 CCR Section 1532.1.
2. Work clothes shall consist of fire retarding, disposable, full-body coveralls, head covers, boots, rubber gloves, and steeled-toe boots or equivalent in accordance with 29 CFR 1926.134, and ANSI Z41. Sleeves at wrists and cuffs at ankles shall be secure.

3. Provide eye protection and hardhats as required by applicable safety regulations and shall conform to ANSI 87.1 and 89.1.

C. Respiratory Protection Requirements:

1. Disposable (single use) respirators are not to be worn for protection against lead.
2. **Providing of Equipment:** Provide all workers, foremen, superintendents, authorized visitors, and inspectors personally issued and marked respiratory equipment approved by NIOSH. When respirators with disposable filters are employed, provide sufficient filters for replacement as recommended by manufacturers or this specification. Selection of respirators shall be made according to the guidance of 29 CFR 1910.134; Title 8 CCR Section 1532.1; ANSI Z88.2; CGAI G7.1; EPA 560 OPTS-86.001; and Table I of this section. The Contractor shall provide masks, new in the box, in all sizes produced by the respirator manufacturer (one each). These masks shall be provided for the exclusive use of the Owner's representatives and shall be available at all times.
3. **Approved Respirators:** Contractor will ensure that all respirators used shall be selected from those approved by National Institute of Occupational Safety and Health (NIOSH) for use in atmospheres containing lead, solvents, removers, and against other toxic materials which may be used during the project.
4. **Powered Air-Purifying Respirators (PAPR) usage:** Full containment work activities associated with the abatement of materials coated with lead-based paint where lead containing dust particulates are expected (i.e., sand blasting) shall be conducted while wearing, at a minimum, a full facepiece, powered air-purifying respirator equipped with HEPA filters during the following tasks or under the following conditions:
 - a. During removal of lead-containing materials.
 - b. During all cleanup and wipe-down of area.
 - c. During final wipe down of work space.
 - d. At any time that air monitoring levels indicate that lead concentrations are at least 500 $\mu\text{g}/\text{m}^3$ or greater.
 - e. Any situation where gross contamination has occurred because of a tear or rupture in the containment and air sampling indicates airborne lead levels have exceeded 500 $\mu\text{g}/\text{m}^3$.
5. **1/2 Face Respirator Usage:** For the following tasks or conditions a 1/2 mask air-purifying respirators equipped with high efficiency filters may be used:
 - a. Provided maximum airborne lead concentration outside the respirator is at or below 250 $\mu\text{g}/\text{m}^3$.
 - b. During intact component removal, paint film stabilization (loose and flaky paint) work.

- c. Pre-construction sealing of openings and penetrations to the work areas with plastic sheeting.
- d. Decontamination of removable items.
- e. Loading lead-containing drums on truck for transportation and unloading bags at approved landfill.

Rest of page intentionally blank, Table 1 follows on next page.

Table 1. Respiratory Protection for Lead Aerosols

Airborne concentration of lead or condition of use	Required Respirator
Not in excess of 500 $\mu\text{g}/\text{m}^3$	*1/2 mask air purifying respirator with high efficiency filters. 2,3 *1/2 mask supplied air respirator operated in demand (negative pressure) mode.
Not in excess of 1,250 $\mu\text{g}/\text{m}^3$	* Loose fitting hood or helmet powered air-purifying respirator with high efficiency filters. *Hood or helmet supplied air respirator operated in a continuous - flow mode - e.g., type CE abrasive blasting respirator operated in a continuous - flow mode.
Not in excess of 2,500 $\mu\text{g}/\text{m}^3$	* Full facepiece air purifying respirator with high efficiency filters. *Tight fitting powered air-purifying respirator with high efficiency filters. *Full facepiece supplied air respirator operated in demand mode. *Full facepiece self-contained breathing apparatus (SCBA) operated in demand mode.
Not in excess of 50,000 $\mu\text{g}/\text{m}^3$	*1/2 mask supplied air respirator operated in pressure demand or other positive - pressure mode
Not in excess of 100,000 $\mu\text{g}/\text{m}^3$	*Full facepiece supplied air respirator operated in pressure demand or other positive-pressure mode - e.g., type CE abrasive blasting respirators operated in a positive - pressure mode.
Greater than 100,000 $\mu\text{g}/\text{m}^3$ unknown concentration, or fire fighting.	*Full facepiece SCBA operated in pressure demand or other positive - pressure mode.

* Greater respiratory protection is always acceptable regardless of lead concentrations.

6. **Type "C" Respirator Usage:** When Type "C" respirators are not required according to 29 CFR 1926.134, Title 8 CCR, Section 1532.1, or this specification, (whichever is more stringent), provide sufficient quantity of filters jointly approved by NIOSH for use in **lead and other** environments so that workers can change filters as required by manufacturer during the workday. Filters shall not be used any longer than one workday. Respirator filters shall be stored at job site in clean room and shall be totally protected from exposure to lead and other hazardous materials prior to their use.
7. **Air Supply Compressors:** Compressors shall meet the requirements of 29 CFR 1910.134 and the following:
 - a. Periodic inspection of the carbon monoxide monitor shall be evidenced.
 - b. Documentation of adequacy of compressed air system/respiratory protection system shall be retained on site. Documentation shall include a list of compatible components with the maximum number and type of respirators that may be used with the system.
 - c. The full facepiece, type "C" supplied-air respirator system shall be fully approved by appropriate regulatory agencies. The compressor shall be specifically for breathing air and have alarms to indicate compressor failure, and overheating. Compressor(s) shall have in-line air-purifying sorbent beds and filters to assure breathing air quality (Grade "D" or better for oil lubricated compressors; Grade "H" or better for electric compressors). The air supply system shall have safeguards to allow for sufficient capacity to allow workers to escape if the air system fails. If an oil-lubricated compressor is used, it shall have a high-temperature or carbon monoxide alarm, or both. If only a high-temperature alarm is used, a carbon monoxide converter shall be used.
 - d. The compressor intake shall be designed so as to avoid entry of contaminated air into the system either from the compressor exhaust or other sources of potential contamination. Periodic testing of compressed air shall ensure that systems provide air of sufficient quality.
 - e. A pressure-indicating gauge shall be placed at the point of connection (distribution point) where the respirator supply hose (which is a part of the approved facemask/hose system) is attached to the air filtration system or any supply manifold which is located between the mask/hose apparatus and the compressor/filter system. The pressure gauge shall be capable of measuring pressure levels that are consistent with those specified by the respirator operating specifications.
 - f. The correct pressure level shall be verified at each distribution point each time the system is engaged. The air supply system will be operated only when operating specifications are maintained.

8. **Fit Testing:** Air respirators shall be fit-tested utilizing isoamyl acetate at the beginning of each project or a minimum of every 12 months as described in Appendix C, 29 CFR 1926.58. Either Isoamyl Acetate Protocol or other similar regulatory protocol may be used.

D. **Bilingual Worker protection procedures (Posted in both English and Spanish):** Adequate shower facilities shall be provided by the Contractor. An employee leaving the Work area shall follow all decontamination procedures necessary or as described herein.

1. **Posted Procedures:** Provide and post, in the Equipment Room and the Clean Room, the decontamination and work procedures to be followed by workers and authorized visitors as described in these Specifications.
2. **Entering the Work Area:** Each worker and authorized visitor shall, upon entering the job site: put on a respirator and clean protective clothing before entering the Equipment Room or the Work area. Clothing that is appropriate for weather and temperature conditions shall be worn under the protective clothing.
3. **Personnel Exiting the Work Area:**
 - a. Ensure that personnel do not leave work areas through the equipment decontamination enclosure.
 - b. All workers and authorized visitors shall, each time they leave the Work area; remove gross contamination from clothing before leaving the Work area using a HEPA vacuum; proceed to the Equipment Room and remove all clothing except respirators by carefully rolling down the garment to reduce exposure to dust; clean the outside of the respirator with soap and water while showering; remove the respirator; and thoroughly shampoo and wash themselves
 - c. Following showering and drying off, each Worker shall proceed directly to the clean change room and dress in clean clothes at the end of each day's Work, or before eating, smoking, or drinking. Before re-entering the Work Area from the clean-change room, each Worker and authorized visitor shall put on a clean respirator and shall dress in clean protective clothing.
 - d. Before re-entering the Work area from the Clean Change Room, each worker and authorized visitor shall put on a clean respirator and shall dress in clean protective clothing.
 - e. All workers and authorized visitors shall, at the end of the work day; place disposable clothing in the abatement waste; clean protective gear, including respirators, according to standard procedures; wash hands and face again; proceed to the shower facilities, being certain to wash hair.
 - f. Workers shall not eat, drink, smoke, or chew gum or tobacco while in the Work area.

- g. Workers shall be fully protected with respirators and protective clothing from the time of first disturbance of lead-coated or contaminated materials prior to commencing actual lead abatement and until final cleanup is completed.
4. **Equipment removal procedures:** Clean surfaces of contaminated containers and equipment thoroughly by wet sponging or wiping before moving such items into the equipment decontamination enclosure system washroom or through the shower for final cleaning and removal to uncontaminated areas.
- a. Contaminated work footwear shall be stored in the Equipment Room when not in use in the Work area. Upon completion of lead abatement, dispose of footwear as contaminated waste.
 - b. Workers removing waste containers from the equipment decontamination enclosure shall enter the holding area from outside wearing a respirator and be dressed in clean disposable coveralls. No worker shall use this system as a means to leave or enter the washroom or the Work area.
5. **Safety Issues:**
- a. During the removal operations the Contractor may be placing his workers in a potentially hazardous electrical environment. Care and special consideration should be exercised by the Contractor to avoid electrical shock to his or her employees. The requirements as set forth in the latest edition of the National Electrical Code shall be adhered to at all times. Particular emphasis shall be placed on the requirements listed in Article 210-BRANCH CIRCUITS, Article 225-OUTSIDE BRANCH CIRCUITS AND FEEDERS, Article 250-GROUNDING, Article 300-WIRING METHODS, and Article 305-TEMPORARY WIRING, whenever and wherever the existing electrical power service shall be de-energized and temporary electrical power utilized.
 - b. During summer work activities the Work area environment may be very hot and humid. The Contractor shall take precautions to protect his or her workers from the hostile environment as well as the lead material. First-aid items such as stretchers, water, and cold packs should be kept adjacent to the Work area exits, thus allowing any personnel requiring emergency treatment egress from the Work area with minimum contamination to the clean environment. No worker shall be allowed to reach through the plastic or air lock door to get water or firstaid supplies during break periods inside the Work area. Breaks, lunch or worker rest periods should be held outside the Work area. All decontamination procedures shall be followed prior to exiting the Work area except in extreme emergencies.
 - c. During cold weather periods the workers shall be provided with adequate protection from the environment to not cause harm to the workers.
 - d. If evacuation of the Work area is required by contaminated personnel due to an emergency, all work efforts shall stop, and all forces shall be directed at minimizing the area contamination, cleanup operations and first-aid procedures. These activities shall be noted in the daily logbook.

- e. During work activities requiring decontamination procedures, the Contractor shall provide a means of communication for the workers inside the Work area without requiring personnel to enter or leave the Work area. This method of communications shall be a two-way radio, localized wire-connected telephone, or similar system. This communication system shall remain intact until the final containment plastic is removed. Then all equipment shall be wiped down, HEPA vacuumed or disposed of as lead-contaminated material.

E. Posting of Warning Signs:

1. Post two safety warning signs which follow the "Sample Format Warning Sign" shown below:

Sample Format Warning Sign
Minimum Size - 24" x 36"
Material - Aluminum or Fiberglass
Script:

WARNING

LEAD WORK AREA

POISON

NO SMOKING OR EATING

F. Emergency Precautions and Procedures:

1. Establish emergency and fire exits from the Work Area. Emergency exits shall be equipped with 2 full sets of protective clothing and respirators.
2. Local medical emergency personnel, both ambulance crews and hospital emergency room staff, shall be notified prior to commencement of abatement operations as to the possibility of having to handle contaminated or injured Workers, and shall be advised on safe decontamination.
3. Contractor shall be prepared to administer first aid to injured personnel after decontamination. Seriously injured personnel shall be treated immediately or evacuated without delay for decontamination. When an injury occurs, the Contractor shall stop Work and implement fiber reduction techniques (e.g., water spraying) until the injured person has been removed from the Work Area.
4. Before starting actual removal of lead material(s), local police and fire departments shall be notified as to the danger of entering the Work Area. The Contractor shall make every effort to help these agencies form plans of action should their personnel need to enter the contaminated area.

1.7 SUPERINTENDENT, FOREMAN, CRAFTSMAN:

The Contractor shall have a job superintendent present at all times while work on this Contract is in progress.

The Project Superintendent (Competent person) shall be thoroughly familiar and experienced with lead removal and related work and shall be familiar with and shall enforce the use of all safety procedures and equipment. He or she shall be knowledgeable of all HUD, EPA, OSHA (Federal and State), and NIOSH requirements and guidelines. He or she shall be trained and certified by DHS in the proper use of all personal protection and safety equipment including, but not limited to, air purification and respiratory systems.

In addition to the Superintendent, the Contractor shall furnish one or more foremen who are familiar and experienced with lead removal and its related work, safety procedures, and equipment. The Foreman shall be the Competent person when the Superintendent is not present.

- A. It shall be a requirement of this Contract that the superintendent and/or one or more of the Contractor's foremen be in the Work area at all times while work is in progress.
- B. It is the intent of these Specifications that all phases of the Work shall be executed by skilled craftsmen experienced or receiving training by experienced personnel in each respective trade.
- C. All superintendents and foremen shall have been trained by attending an appropriate HUD approved Lead-Based Paint Supervisor training course and satisfactorily passing a California State Department of Health Services sanctioned examination for the above stated training program. Only formal training programs will be accepted.
- D. Workers shall, at a minimum, receive the appropriate classroom training program covering the topics listed in the HUD guidelines and the OSHA standard and shall have an additional 8 hours of hands-on training prior to beginning abatement work. Training will be through an appropriate HUD approved Lead-Based Paint work training course.
- E. The Competent person on-site must be able to clearly communicate in a manner so that the Owner's Consultant and Owner can clearly understand.

PART 2 - MATERIAL AND EQUIPMENT

2.1 MATERIALS:

- A. **Packaging:** Deliver all materials in the original packages, container, or bundles bearing the name of the manufacturer and the brand name.
- B. **Storage:** Store all materials subject to damage off the ground, away from wet or damp surfaces, and under cover sufficient to prevent damage or contamination. Damaged or deteriorating materials shall not be used and shall be removed from the

premises. Material that becomes contaminated with lead shall be disposed of in accordance with the applicable regulations.

- C. **Chemical removers:** Shall not contain methylene chloride. Chemical removers shall be compatible with and not harm the substrate they are applied to. Chemical removers used on masonry surfaces shall contain anti-stain formulation that inhibits the discoloration of stone, granite, brick, and other masonry construction. Chemical removers used on interior surfaces shall not raise or discolor the surface being abated.
- D. **Chemical stripping agent neutralizers:** May be used on exterior surfaces only. Neutralizers shall be compatible with and not harm the substrate to which they are applied. Neutralizers shall be compatible with the stripping agent that has been applied to the surface substrate.
- E. **Plastic:** (Fire retardant polyethylene) Sheet, of 6-mil thickness or greater as specified in sizes to minimize the frequency of joints.
- F. **Tape:** Capable of sealing joints of adjacent sheets of polyethylene and for attachment of polyethylene sheet to finished or unfinished surfaces of dissimilar materials and capable of adhering under both dry and wet conditions. Use tape with tough backing that does not leave residue on the adhering surface.
- G. **Phosphate Wash (TSP Wash):** Shall consist of a solution containing at least one ounce of 5 percent trisodium phosphate (TSP) to each gallon of water.
- H. **Impermeable containers:** Suitable to receive and retain any lead-coated or contaminated materials until disposal at an approved site, labeled in accordance with OSHA Regulation 29 CFR 1910.1025 and DOT 49 CFR 171-177. Containers must be both air and watertight and must be resistant to damage and rupture. Plastic bags shall be a minimum of 6-mil thick.
- I. **Warning labels and signs:** As required by 29 CFR 1926, 29 CFR 1910.245, and Title 8 CCR, Section 1532.1.
- J. **For bridging encapsulant use:**
 - 1. Encapsulant to be specified and approved by Owner's representative
- K. **Encapsulants/primers:**
 - 1. Encapsulant to be specified and approved by Owner's representative
- L. **Surfactants:** Or wetting agent, for amending water will be 50 percent polyoxyethylene ether and 50 percent polyoxyethylene ester, or equivalent, at a concentration of one ounce per 5 gallons of water.
- M. **Other materials:** Provide all other materials, such as lumber, nails, and hardware that may be required to construct and dismantle the decontamination area and the barriers that isolate the Work area.

2.2 TOOLS AND EQUIPMENT:

- A. **Tools:** Provide suitable tools for lead-based paint removal.
- B. **Air filtration equipment:** High efficiency particulate air (HEPA) filtration systems shall be equipped with filtration equipment in compliance with ANSI Z9.2-79, local exhaust ventilation or equal. No air movement system or air filtering equipment shall discharge unfiltered air outside the Work area. If volatile chemicals are used, use manufacturer's guidelines and provide appropriate filters for solvent vapor or other organic based material use.

PART 3 - EXECUTION

3.1 PREPARATION (Interior Areas):

- A. **Separation of work areas from occupied areas as directed in the Scope of Work:**
 - 1. **Reference:** Contractor will use the applicable procedures as outlined in Section 01010HM or, if none, use those contained within. Where conflict among requirements (e.g., other concurrent work) or with these Specifications exists, the more stringent requirements shall apply.
 - 2. **For areas requiring constructed barrier walls:** Separate parts of the building required to remain in use (as shown on Plans) from parts of the building that will undergo lead-containing or lead-based paint removal by means of airtight barriers, constructed as follows:
 - a. Build suitable wood or metal framing and apply 3/8 inch minimum thickness sheathing on work side only, unless noted otherwise.
 - b. Cover both sides of partition with double layer of plastic sheet with joints staggered and sealed with tape. Edges of partition at floor, walls, and ceiling shall be caulked airtight.
 - 3. **Electrical Shut-down:** Shut down electric power which serves the Work area. Provide temporary power and lighting and ensure safe installation of temporary power sources and equipment per applicable electrical code requirements.
 - 4. **HVAC Shut-down:** Shut down and isolate heating, cooling, and ventilating air systems to prevent contamination and fiber dispersal to other areas of the structure. Physically blank off, with light gage metal, all supply and return air ductwork which leads to and from an isolated work area when the air-handling unit serves areas other than within the isolated work area.
 - 5. **Seal off openings:** Seal off all openings, including but not limited to windows, corridors, doorways, skylights, ducts, grills, diffusers, and any other penetrations of the Work areas, with plastic sheeting (minimum of 4-mils thick) sealed with tape.

B. Preclean work area:

1. **Moveable Objects:** Clean all moveable objects within the Work area using HEPA vacuum equipment and wet cleaning methods. Remove these objects from the Work area to a designated temporary storage location.

Protection of and accounting for the stored materials is the sole responsibility of the Contractor.

2. **Fixed Objects:** Preclean fixed objects within the proposed work areas, using HEPA vacuum equipment and/or wet cleaning methods as appropriate, and enclose with minimum of 6-mil polyethylene sealed with tape.
3. **Vacuum and Wet Methods:** Preclean the proposed work areas using HEPA vacuum equipment or wet cleaning methods as appropriate. Do not use methods that raise dust, such as dry sweeping or vacuuming with equipment not equipped with HEPA filters.

C. Prepare work area:

1. **Reference:** Contractor will use the applicable procedures as outlined in Section 01010HM or, if none, use those contained within. Where conflict among requirements (e.g. other concurrent work) or with these Specifications exists, the more stringent requirements shall apply.
2. **Non-Contaminated Objects:** Remove and clean objects, such as lights and other items not previously sealed off, that may interfere with lead removal. Use HEPA vacuum equipment and wet methods during fixture removal to reduce lead dispersal. Wrap in plastic and store for reinstallation upon completion of testing procedures.
3. **Protection of Fixed Objects:** Protect all fixtures, grills, lockers, and other non-removable equipment from water. Also, protect painted surfaces and flooring.
4. **Plasticization:** Cover floor and wall surfaces with plastic sheeting sealed with tape. Use a minimum of two layers of 6-mil plastic on floors and two layers of 4-mil plastic on walls. Cover floors first so that plastic extends at least 12 inches up on walls, then cover walls with plastic sheeting to the floor level, thus overlapping the floor material by a minimum of 12 inches.
 - a. All criticals (doors, vents, openings, wall penetrations, etc.) will be covered with 2 layers of 6-mil plastic and secured with duct tape to prevent leakage of air. If windows, doors, door frames, or other interior/exterior transitional items on which lead-based paint is to be removed, place 2 layers of 6-mil plastic just to the outside of the surface area to be removed. All exterior lead-based paint removal is to be performed according to Section 9912, Lead-Based Paint Removal (Exterior).
 - b. The second layer of floor sheeting may be black or dark in color. If floor coverings are scheduled for removal, per Plans and/or Scope of Work, floor

plastic is not placed until after floor coverings are removed, which occurs during Lead Removal activities, paragraph 3.2.

- c. All joints in the plastic sheeting shall have a minimum of 12 inches of overlap and shall be securely sealed with tape to prevent leakage of air and water.
- 5. **Emergency Exits:** Maintain emergency and fire exits from the Work areas, or establish alternative exits satisfactory to fire officials.
- 6. **Establish a reduced pressure in the Work area**
 - a. **Determine the Ventilation Requirements:**

- (1) **General:** Provide fully operational negative pressure systems supplying a minimum of one air change every 15 minutes. Determine the volume in cubic feet of the work area by multiplying floor area by ceiling height. Determine total ventilation requirement in cubic feet per minute (cfm) for the work area by dividing this volume by the air change rate.

Ventilation Required (CFM) = Volume of work area (cu. ft.)/15 min.

- (2) **Number of Units:** Determine number of units needed to achieve 15 minute change-rate by dividing the ventilation requirement (CFM) above by capacity of exhaust units(s) used. Capacity of a unit for purposes of this section is the capacity in cubic feet per minute with fully loaded filters (pressure differential which causes loaded filter warning light to come on) in the machines labeled operating characteristics.

$$\text{Number of Units Needed} = \frac{\text{Ventilation Requirement (CFM)}}{\text{Capacity of Unit with Loaded Filters (CFM)}}$$

Add one (1) additional unit as a backup in case of equipment failure or machine shutdown for filter changing.

- (3) **Location of Exhaust Units:** Locate exhaust unit(s) so that makeup air enters work area primarily through decontamination facilities and traverses work area as much as possible. This may be accomplished by positioning the exhaust unit(s) at a maximum distance from the worker access opening or other makeup air sources.

Place end of unit, or its exhaust duct, through an opening in the plastic barrier or wall covering. The plastic around the unit or duct shall then be sealed with tape.

- (4) **Venting or Exhaust:** Unless authorized in writing by the Project Coordinator, vent negative air exhaust to outside of building. Exhaust outlet shall be a minimum of ten feet above ground level.

- (5) **Supplemental makeup air inlets:** Provide where required for proper air flow through the work space in location approved by the Project

Coordinator by making openings in the plastic sheeting that allow air from outside the building into the work area.

- (6) **Makeup Air Inlets:** Locate auxiliary makeup air inlets as far as possible from the exhaust unit(s) (e.g., on an opposite wall), off the floor, and away from barriers that separate the work area from occupied clean areas. Cover with flaps to reseal automatically if the negative pressure system should shut down for any reason. Spray flap and around opening with spray adhesive so that flap seals if it closes.

b. Use of the Negative Pressure System:

- (1) **General:** Each unit shall be serviced by a dedicated minimum 115V-20A circuit with overload device tied into an existing building electrical panel that has sufficient spare capacity to accommodate the load of all negative pressure units connected. Dedication of an existing circuit may be accomplished by shutting down existing loads on the circuit.
- (2) **Testing the System:** Test negative pressure system before any lead-containing material is wetted or removed. After the work area has been prepared, the decontamination facility set up, and the exhaust unit(s) installed, start the unit(s) (one at a time). Demonstrate operation and testing of negative pressure system to Project Coordinator.
- (3) **System Evaluation:** A demonstration of the negative pressure system to the Project Coordinator will include, but not be limited to, the following:
 - (a) Plastic barriers and sheeting move slightly in toward work area.
 - (b) Curtain of decontamination units move slightly in toward work area.
 - (c) There is a noticeable movement of air through the decontamination unit. Use smoke tube to demonstrate air movement from Clean Room to Shower Room, from Shower Room to Equipment Room, and from Equipment Room to Work Area.
 - (d) Use smoke tubes to determine a positive motion of air across all area in which work is to be performed.
 - (e) Use a differential pressure meter or manometer to demonstrate a pressure difference of at least 0.02 inches of water across every barrier separation the Work Area from the balance of the building or outside.
 - (f) Modify the negative pressure system as necessary to successfully demonstrate the above.

D. Decontamination Facilities:

1. **General:** Contractor will use the applicable procedures as outlined in Section 01010HM or, if none, use those contained within. Where conflict among requirements (e.g., other concurrent work) or with these Specifications exists, the more stringent requirements shall apply.

2. **Construction Review:** Build suitable decontamination facilities described herein, as previously submitted for review, before start of construction.
3. **Air Locks and Access Doorways:** In all cases, access between contaminated and uncontaminated rooms or areas shall be through an air lock previously defined. Passage between any two rooms within the decontamination facility shall be through an access doorway.
4. **3-Stage Decontamination Enclosure:** Construct a worker decontamination enclosure system contiguous to the Work area consisting of three totally enclosed chambers to conform to standard Plans bound herein and as follows.
 - a. A shower room with two access doorways, one to the equipment room and one to the clean room. Plastic, if used, on shower room and adjoining equipment and clean rooms shall be opaque.
 - b. The shower room shall contain at least one shower with hot and cold or warm water. Careful attention shall be paid to the shower enclosure to ensure against leaking of any kind.
5. **Remote Decontamination Enclosures:** For remote decontamination systems (non-contiguous to the Work area) construction of the shower will conform to Section 02071HM, Part 3.1, D1, above with the following modifications:
 - a. The enclosure need not be attached to the Work area, but clean room and equipment rooms must be clearly marked at their respective entrances.
 - b. A HEPA filtration machine must be attached to the equipment room and must be operational while the decontamination unit is in use.
6. **Equipment Decontamination Enclosures:** For an equipment decontamination enclosure facility, construct two totally enclosed chambers as follows:
 - a. A washroom, constituting an air lock, with an access doorway to a designated area of the Work area and an access doorway to the holding area.
 - b. A holding area, constituting an air lock, with an access doorway to the washroom and an access doorway to an uncontaminated area.
7. **Entry/Exit systems:** All decontamination systems or entry/exit system air locks will be constructed using Z-flap design incorporating 2 layers of 6-mil plastic with the flaps extending the full height and width of the entrance space.

E. Maintenance of enclosure system:

1. Ensure that barriers and plastic linings are effectively sealed and taped. Repair damaged barriers and remedy defects immediately upon discovery.
2. Visually inspect enclosures at the beginning of each work period.

3. Use smoke methods to test effectiveness of barriers when directed by Owner or representative of Owner.

F. Lead removal work shall not commence until:

1. Arrangements have been made for disposal of waste at an acceptable site.
2. Work areas and decontamination facility and parts of the building required to remain in use are effectively segregated.
3. Tools, equipment, and material waste receptors are on hand.
4. Arrangements have been made for building security.
5. All other preparatory steps have been taken and applicable notices posted and permits obtained.
6. Removal work will not begin until the Owner's consultant authorizes work to commence, in writing.

3.2 LEAD REMOVAL:

A. General: Prepare site per paragraph 3.1.

B. References: Contractor will use the applicable procedures as outlined in Section 01010HM or, if none, use those contained within. Where conflict among requirements (e.g. other concurrent work) or with these Specifications exists, the more stringent requirements shall apply.

C. Negative pressure system during abatement Operations:

1. Start exhaust units before beginning work (before any lead-containing material is disturbed). After abatement work has begun, run units continuously to maintain a constant negative pressure until decontamination of the work area is complete. Do not turn off units at the end of the work shift or when abatement operations temporarily stop.
2. Start abatement work at a location farthest from the exhaust units and proceed toward them. If an electric power failure occurs, immediately stop all abatement work and do not resume until power is restored and exhaust units are in operation again.
3. At completion of abatement work, allow exhaust units to run, to remove airborne dust that may have been generated during abatement work and cleanup and to purge the work area with clean makeup air. The units may be required to run for a longer time after decontamination, if dry or only partially wetted lead material was encountered during any abatement work.

D. Lead-Containing Materials Removal:

1. Ensure that the material is thoroughly soaked with amended water prior to removal.
2. Ensure that the air is misted thoroughly during the removal process.
3. Remove materials intact as much as possible.

E. Containerizing Waste:

1. **Daily Containerizing:** During each day's work, the bulk lead material shall be bagged in 6-mil thick bags, before it dries. No lead material shall be allowed to lie on the floor overnight.
2. **Types of Containers:** Place the material in sealed containers (6-mil double bags or hard sealable containers).
3. **Labels:** Place caution labels on containers in accordance with OSHA Regulation 29 CFR 1910.1025 and DOT 49 CFR 171-177 if not already preprinted on containers.
4. **Cleaning:** Clean external surfaces of containers thoroughly by wet sponging in the designated area. Move containers to washroom, wet clean each container thoroughly, and move to holding area pending removal to uncontaminated areas. If the holding area is outside containment it will be a locked and secured area with appropriate warning signage at entrance. If holding area is within containment ensure that area is secure and appropriate signage is maintained.
5. **Safety:** Ensure that containers are removed from the holding area by workers who have entered from uncontaminated areas dressed in clean coveralls.

F. Post Removal Cleaning: After completion of stripping work (chemical or abrasive), all surfaces from which lead-based paint or lead containing material has been removed shall be wet brushed and sponged or cleaned by an equivalent method to remove all visible material. During this work, the surfaces being cleaned shall be kept wet. At the Contractor's option, the layer of plastic exposed to the lead may be removed, leaving intact the final layer of plastic.

G. Safety: Ensure that workers do not enter from uncontaminated areas into the washroom or the Work area; ensure that contaminated workers do not exit the Work area through the equipment decontamination enclosure system.

3.3 CLEANUP AND CLEARANCE MONITORING:

Employ the following procedures in cleaning up the Work area:

A. Wet Clean: Wet-clean all surfaces and remove all visible accumulation of lead containing material from the Work area. Prepare the Work area for the initial visual inspection using a sequenced cleaning technique using HEPA vacuuming, a TSP washdown, and a second HEPA vacuuming.

- B. **Initial Visual Inspection:** Once the Work area is clean of visible accumulations of lead material, the Owner's consultant will perform the visual inspection. The Contractor will continue the HEPA vacuuming and washdown process until the area is visible clean.
- C. **Plastic Removal:** When the area is deemed clean by the Owner's consultant, remove plastic from all surfaces
- D. **For surfaces to be stabilized perform the following:**
1. As directed by Owner's Representative, lead painted surfaces shall be sealed with a non-lead containing encapsulating primer after the surface is clean and dry. Apply encapsulant using airless spray equipment or suitable paint applicator where a uniform coat can be applied.
 2. Prepare and apply encapsulating primer according to the manufacturer's specifications. Because application by spraying could cause dissemination of residual LBP, encapsulating primer must be applied with as much caution and at as low a nozzle pressure as possible.
 3. Encapsulating primer shall be applied according to manufacturer's specifications. Encapsulating primer shall be allowed to dry between coats, per manufacturer's recommendations.
 4. Upon completion of paint stabilization work, notify Owner's consultant in writing that stabilization surfaces are ready for review.
- E. **Final Visual Inspection:** Owner's consultant will conduct a thorough visual inspection to determine the completeness of encapsulation and use a damp cloth for wiping abated surfaces prior to collecting the actual wipe samples.
- F. **Clearance Wipe Testing:** Upon successful completion of the visual inspection and Owner's consultant's determination that all surfaces in the Work area are dry and free of contamination, the clearance wipe tests will be conducted. A certificate of Visual Inspection shall be issued by the Owner's Representative and shall be signed by both the contractor and the Owner's Representative.
1. The final wipe clearance test will consist of sampling and analysis in accordance with the HUD guidelines. The levels noted in the Guidelines will be achieved prior to acceptance.
 2. Contractor shall continue cleaning the Work site until the accepted lead level is achieved.
- G. **Additional inspection/testing:** Additional inspection/testing required after the sequence detailed above will be the responsibility of the Contractor. In the event of additional testing, the Contractor may reimburse Owner, or reduce the Contract amount by change order. It is the Owner's intent to have, at no charge to the Contractor, one set of inspections/tests performed in each area. A test may consist of one sample or a series of samples performed at the same time.

- H. **Dismantling the negative air system:** When a final inspection and the results of final wipe tests indicate that the area has been decontaminated, exhaust units may be removed from the work area. Before removal from the work area, remove and properly dispose of pre-filter, and seal intake to the machine with 6-mil polyethylene to prevent environmental contamination from the filters.

3.4 **HANDLING AND DISPOSAL OF LEAD-COATED MATERIALS AND LEAD-CONTAMINATED WASTE:**

Waste Characterization: Contractor shall submit to Owner's consultant, copies of waste characterization testing prior to transportation of all waste.

- A. **Storage:** Store all waste material in a lockable container that is inaccessible to all persons other than employee's of the Contractor. Until TCLP testing proves a category to be non-hazardous, all waste shall be considered hazardous, and stored as such. Any material found to be hazardous by way of testing shall be labeled "**Hazardous Waste - Contains Lead**" and the date that the Contractor began to collect the waste in that container. All hazardous and non-hazardous waste shall be kept in totally and completely separate containers.

B. **Waste Segregation**

1. All categories of waste identified in this specification shall be kept separate from each other. The categories that have been identified include:
 - a. Waste water from shower and cleaning operations
 - b. Disposable suits and respirator cartridges
 - c. Components that are painted with Lead-Based paint
 - d. Components that are lead-laden (e.g., ceramic tile)
 - e. Paint chips, debris and vacuum contents
 - f. Plastic sheeting, duct tape
 - g. Rags, sponges, mops and other items used to conduct clean up activities

- C. **Representative Samples:** Representative material of each of the categories must be sampled and submitted for testing to determine if the material in the category are hazardous.

1. Representative samples of waste materials shall be collected by the Consultant.

D. **Waste Testing**

1. At no time shall waste be removed from the site without the following documentation submitted to the Owner or Owner's representative for approval.
 - a. TCLP, STLC, and TTLC testing results as required by the specifications or according to local and state requirements.

- b. Hazardous waste manifest for those materials identified as hazardous wastes.
 2. Testing of those categories of materials shall be performed to minimize the storage of assumed hazardous materials. Contractor shall collect at least one composite sample from each of the categories listed above in section 3.4.B, "Waste Segregation." The analysis shall be conducted to determine if any of the waste categories are classified as a RCRA hazardous waste. The Contractor shall determine if testing for other compounds, such as pH, Flashpoint, etc., are required for disposal at a particular landfill.
 3. If test results of the composite samples for any of the Waste Segregation categories indicate that the sampled materials are found to contain greater than the action levels indicated below, those materials represented by the composite sample shall be disposed of as Hazardous Waste.
 - a. Greater than or equal to 1000 PPM of the total Lead as determined by the Total Threshold Limit Concentration Procedure (TTLC) by EPA 6010.
 - b. Greater than or equal to five (5) PPM of soluble Lead as determined by the "California Wet Test" or Soluble Threshold Limit Concentration Procedure (STLC) by EPA 200.7.
 - c. Greater than or equal to five (5) PPM of leached Lead as determined by the Toxicity Characteristic Leaching Procedure (TCLP) by EPA 200.7
 4. All waste must be transported by a Certified Hazardous Waste Transporter.
 5. If the test results for any of the waste segregation categories indicate that less than the action levels listed above were detected, those materials represented by the composite sample may be disposed of as construction debris provided they do not meet any other criteria that would designate them as a hazardous waste.
 6. The Abatement Contractor will be required to comply with the Resource Conservation and Recovery Act (RCRA) and/or any other applicable state, county law, regulation and/or guidelines, whichever is the most stringent.
- D. **Waste Transportation:** Submit the method of transport of hazardous waste including name, address, EPA I.D. number, and telephone number of transporter.
1. If the Abatement Contractor is not a RCRA/DOT/EPA certified Hazardous Waste Transporter, then a contract shall be entered into with a certified Transporter to move the waste. The Abatement Contractor shall require the certified hazardous waste transport firm to follow RCRA, DOT, EPA, and any/all other applicable regulations. Many transporters are also capable of supplying pertinent information and services applicable to necessary rules, regulations, and specifications. The certified Transporter/hauler shall submit to the Owner or Owner's representative for approval their qualifications to perform the work as specified herein. The Abatement Contractor shall be responsible for the actions of the waste hauler as pertaining to waste removal and disposal under this section and all EPA, DOT, and other applicable regulations.

- E. **Hazardous Waste Site:** Submit for approval the name, class, address, EPA I.D. number, and telephone number of hazardous waste site(s) to be utilized for disposal.
1. The Abatement Contractor must supply documents that detail the site(s) to be used for ultimate waste disposal. Documents from these disposal sites must be supplied by the Abatement Contractor to the **Owner or Owner's representative** from the disposal facilities stating that hazardous and/or construction waste will be accepted by these facilities. In addition, the Abatement Contractor must submit documents from these sites proving that they are licensed/permitted to accept such waste and will accept the waste proposed by the Abatement Contractor for treatment or ultimate disposal.
- D. **Containers:** Containers to be loaded for transportation from the Holding Area must be removed by Workers who have entered from uncontaminated areas, dressed in clean overalls. Workers must not enter from the Holding Area into the Washroom or the Work Area.
1. Waste Containers - The Abatement Contractor will comply with EPA and DOT regulations for waste containers. The Abatement Contractor shall contact the State and Local authorities to determine their criteria for containers. In the case of any conflict in regulations, the more stringent regulation shall apply.
 - a. Paint Chips: The Abatement Contractor shall place lead-based paint fragments and debris produced as a result of any abatement activity, and lead dust in 6-mil polyethylene (plastic) bags that are air-tight and puncture-resistant.
 - b. Cleaning Materials: The Abatement Contractor will place all disposable cleaning materials such as sponges, mop heads, filters, disposable clothing, and brooms in six-mil plastic bags or sealable drums. If after testing, those materials are determined to be hazardous, the bags or drums will be sealed, labeled, and considered hazardous waste.
 - c. Contaminated Debris: In Particular, the Abatement Contractor shall separate, label, and containerize the following.
 - (1) All paint fragments removed by chemical strippers, surface preparation, or by any abatement methodology.
 - (2) Grossly contaminated body suits.
 - (3) HEPA vacuum contents, filters, and respirator cartridges: paint chips or other abatement debris on plastic should always be HEPA vacuumed prior to picking up the plastic.
 - (4) Dust/Debris or contaminated materials.
 - (5) All hazardous waste or materials should be kept totally separate from non-hazardous materials.
 - (6) Polyethylene Sheeting: Prior to removing any six (6) mil polyethylene sheeting, the Abatement Contractor shall lightly mist the sheeting in order

to keep dust down and remove and containerize any debris by folding the polyethylene sheeting inward to contain debris and to form tight bundles to containerize for disposal. The Abatement Contractor shall place all plastic sheeting in six (6) mil thick polyethylene bags or sealable drums, and seal with duct tape.

(7) **Liquid Waste:** The Abatement Contractor shall contain and properly dispose of all liquid waste, including lead-contaminated wash water. The container for waste waters shall be lined 55 gallon metal drums.

(8) **Solvents:** The Abatement Contractor shall place solvent residues and residues from strippers in drums made out of materials that cannot be dissolved or corroded by chemicals. Solvents will be tested by the Abatement Contractor to determine if they are hazardous. Solvents, caustic, and acid waste must be segregated and not stored in the same containers.

2. The Abatement Contractor shall HEPA vacuum the exterior of all waste containers prior to removing the waste containers from the work area and shall wet wipe the containers to ensure that there is no residual contamination. Containers should then be moved out of the work area into the designated storage area.

F. **Disposal:** The sealed lead containers shall be delivered to Contractor's predesignated approved Hazardous Waste Site for burial; in accordance with Title 22, CAC, EPA guidelines and 40 CFR 61.156 and local Air Pollution Control District Regulations.

G. **Notification of Transport:** Notify the Owner's consultant **48 hours in advance** of the time when contaminated materials are to be removed from the site.

H. **Safety:** Contractor shall be responsible for safe handling and transportation of hazardous waste generated by this Contract to the designated Hazardous Waste Site.

I. **Hazardous Materials Spills:** Contractor shall hold the Owner and Owner's consultant harmless for claims, damages, losses, and expenses, including attorney's fees arising out of or resulting from, lead spills on the site or spills enroute to the disposal site.

3.5 **REESTABLISHMENT OF OBJECTS AND SYSTEMS:**

A. **Relocation of Moveable Objects:** Relocate objects moved to temporary locations in the course of the Work to their proper positions. Only clean objects are to be moved into the areas.

B. **Remounting Objects:** Remount objects removed in the course of the Work in their former positions. Repair any moveable or fixed objects damaged during the course of the Work.

C. **Systems reestablishment:** Reestablish HVAC, mechanical, and electrical systems in proper working order.

1. Install new HVAC filters and dispose of used filters as contaminated waste.
- D. **Building repair/repaint:** Repair any damage to building, or building systems (electrical, mechanical, plumbing, etc.) which was not noted in writing prior to work area preparation.
1. Repaint any areas damaged during the course of the Work unless this work is scheduled for repair by others. See paragraph 1.2 C, Related Work Specified Elsewhere, of this section. Quality of paint and workmanship shall be consistent with that found within the building prior to this Project, unless otherwise stated. Refer to Section 09900-Painting.

END OF SECTION

CERTIFICATE OF VISUAL INSPECTION

BUILDING
NAME/NUMBER: _____

CONTAINMENT AREA
DESCRIPTION: _____

In accordance with Section 02071, Part 3.3, Project Clean-up and Inspection the Contractor hereby certifies that he has visually inspected the Work Area (all surfaces including ledges, walls, ceiling, floor wherein lead-containing materials resided) all lead laden materials scheduled for removal have been removed and has found no visible evidence of those materials or its debris remaining.

By: _____ Date: _____
(SIGNATURE)

(PRINT NAME)

(PRINT TITLE)

PROJECT ADMINISTRATOR CERTIFICATION

The Project Administrator hereby certifies that he has accompanied the Contractor on his visual inspection and verifies that this inspection has been thorough and to the best of his knowledge and belief, the Contractor's Certification above is a true and honest one.

By: _____ Date: _____
(SIGNATURE)

(PRINT NAME)

(PRINT TITLE)

SECTION 02093HM

INTERIM CONTROLS REGARDING LOOSE AND FLAKY PAINT (Paint Film Stabilization)

PART 1 - GENERAL

1.1 **SCOPE:**

This Specification covers the implementation of interim controls regarding the removal of loose and flaky lead-based paint from substrates as described in Section 01010HM, Scope of Work.

1.2 **DESCRIPTION OF WORK:**

- A. The Work specified herein shall be the removal of loose and flaky lead-based paint by persons knowledgeable, qualified, and trained in interim controls for the removal, treatment, handling, and disposal of loose and flaky lead-based paint, and the subsequent cleaning of the affected environment, and who comply with Federal, State, and Local regulations and guidelines which mandate work practices, and who are capable of performing the Work of this Contract.
- B. **Contract Fulfillment:** The Contractor shall supply all labor, materials, equipment, services, insurance, and incidentals which are necessary or required to perform the Work in accordance with applicable governmental regulations and guidelines and these Specifications.

1.3 **TERMINOLOGY:**

See Section 02092HM, Part 1.3 for Terminology.

1.4 **APPLICABLE DOCUMENTS:**

Comply with Section 02092HM, Part 1.4 for Applicable Documents.

1.5 **SUBMITTALS AND NOTICES:**

Comply with Section 02092HM, Part 1.5 for Submittals and Notices.

1.6 **PERSONAL PROTECTION AND SAFETY:**

Comply with Section 02092HM, Part 1.6. It shall be modified in the following particulars only.

A. Respiratory Protection Requirements:

1. Disposable (single use) respirators are not to be worn for protection against lead.
2. For the following tasks or conditions, a 1/2 mask air-purifying respirator, equipped with high efficiency filters may be used:
 - a. Provided maximum airborne lead concentration outside the respirator at or below 500 $\mu\text{g}/\text{m}^3$:
 - b. Pre-construction sealing of openings and penetrations to the work areas with plastic sheeting.
 - c. Decontamination of removable items.
 - d. During removal of lead-containing materials.
 - e. During all cleanup and wipe down of area.
 - f. During final wipe down of work space.
 - g. Loading lead-containing drums on truck for transportation and unloading bags at approved landfill.
3. A full facepiece, powered air-purifying respirator equipped with HEPA filters will be required under the following conditions:
 - a. At any time that air monitoring levels indicate that lead concentrations are at least 500 $\mu\text{g}/\text{m}^3$ or greater.
4. All employees and visitors will wear appropriate filters for the work at hand. During chemical use, follow manufacturer guidelines for appropriate personal and respiratory protection.

B. Bilingual Worker Protection Procedures (Posted in both English and Spanish):

1. Each worker and authorized visitor shall: put on a respirator and don one suit of protective clothing before entering the Equipment Room or the Work area. Clothing that is appropriate for weather and temperature conditions is worn under the protective clothing.
2. Each time before leaving the work area, all workers and authorized visitors shall remove gross contamination from the protective clothing using a HEPA vacuum, then remove protective clothing except respirators by carefully rolling down the garment to reduce exposure to dust and place within a labeled hazardous material

6-mil plastic bag which is within the work area. Personnel will then proceed through to the washroom and clean the outside of the respirator with a wet disposable towel; remove the respirator; and thoroughly wet wipe themselves

3. Following wet wiping and decontamination procedures, each Worker shall proceed directly to the outside area at the end of each day's Work, or before eating, smoking, or drinking.
4. Before re-entering the Work Area, each Worker and authorized visitor shall put on a clean respirator and shall dress in clean protective clothing as described above.
5. Contaminated work footwear shall be stored in the Equipment Room or Work area in a labeled 6-mil bag when not in use in the Work area until they are appropriately decontaminated. Upon completion of lead work, dispose of footwear as contaminated waste unless they can be appropriately decontaminated. All porous type footwear will be disposed of as contaminated waste.
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. Workers shall not eat, drink, smoke, or chew gum or tobacco while in the Work area.
8. Workers shall be fully protected with respirators and protective clothing from the time of first disturbance of lead-coated or contaminated materials prior to commencing actual lead abatement and until final cleanup is completed.

1.7 SUPERINTENDENT, FOREMAN, CRAFTSMAN:

Comply with Section 02092HM, Part 1.7, Superintendent, Foreman, Craftsman.

PART 2 - MATERIAL AND EQUIPMENT

Comply with Section 02092HM, Part 2.

PART 3 - EXECUTION

3.1 PREPARATION:

A. For exterior work, the contractor shall prepare the area as follows:

1. Doors and Windows: Doors and windows on the side of the building upon which a dust-generating method is being used, and on the same floor and all floors below, must be covered with 6-mil thick polyethylene sheeting.

2. Plants and ground: The ground and any plants or shrubs in the area in which exterior abatement is occurring shall be covered with two layers of 6-mil plastic in a tarp-like fashion, sufficiently bonded together to form a single layer and weighted at all edges so as to prevent blowing. A single 10-mil plastic sheet may be substituted. Such covering shall cover from the side of the structure to a point at least eight feet away from the structure for every story in height (10'). The covering shall be taped or otherwise attached to the structure.
 3. Ground covers shall always be placed in a manner that traps all debris and water. This is best accomplished by elevating the edges.
 4. The plastic ground cover shall be properly disposed of and not re-used.
- B. For exterior work where water blasting occurs, the contractor shall prepare the area as follows:
1. Critical Barriers shall be erected whereby all water and loose paint shall be contained within the Work Area.
 2. Ground: The ground shall be covered with 10-mil or 6-mil reinforced polyethylene and shall extend 18 inches vertically at all perimeter walls.
 3. Vertical Surfaces: A single layer of 6-mil polyethylene shall be constructed as a critical barrier on all vertical walls and shall overlap 12 inches on top of ground poly.
 4. Contractor shall contain all water within the enclosure. Contractor shall construct containment as to prevent water leakage from containment or into buildings.
 5. All containment plastic shall be properly disposed of and not re-used.
 6. All water within the containment shall be filtered with a HEPA filtration device.
- C. For all exterior work:
1. **Special Areas:** Any abatement project being performed on any structure other than a building shall be arranged, equipped, and operated in a manner that will eliminate the possibility of lead contaminates or lead contaminated materials escaping from the work area.
 2. **Maintain Barriers:** The abatement subcontractor shall maintain polyethylene barriers and a clean area as long as needed for the safe and proper completion of the work. Any openings or tears in the work area barriers shall be corrected by the abatement subcontractor at the beginning of each work day and as necessary during the workday with such openings and barriers in place and acceptable to the owner's consultant.
 3. **Prior to barrier removal:** Barriers shall not be removed until the work areas are thoroughly cleaned, and the area is approved by the consultant. All debris must be bagged and removed from work areas, and the lead surface wipe samples must

have passed final clearance test, in accordance with provisions detailed in the barrier removal.

4. **Use of mini-isolation chamber:** At the Owner's, and consultant approval, the Abatement Subcontractor may utilize a portable mini-isolation chamber to create an isolated work area around single components to be removed. This chamber shall still be equipped with an adjacent clean room, and become an isolated work area sealed at all seams to where it is attached to adjacent surfaces. It shall also satisfy all requirements for a work area and satisfy all clearance criteria, as identified in this section and local law.
5. **Signs:** Prior to the preparation of the dwelling for abatement, the abatement subcontractor shall place warning signs immediately outside all entrances and exits to the dwelling, warning that abatement work is being conducted in the vicinity. The signs shall be at least 20" x 14" and read

**WARNING:
LEAD WORK AREA
POISON
UNAUTHORIZED ENTRY PROHIBITED
NO SMOKING, EATING OR DRINKING
ALLOWED IN THE WORK AREA**

6. Signs shall be in bold lettering with lettering not smaller than two inches tall.
 7. Construct and maintain suitable polyethylene barriers within the building to isolate the exterior work area from the interior of the building. Make every effort to maintain a distance of 25 feet from the barrier tape to the closet scheduled point of work within the Work area(s).
 8. Maintain emergency and fire exits from Work Areas.
- D. For interior work, the contractor shall prepare the area as follows:
1. **HVAC shut down:** Shut down or isolate heating, cooling, ventilation air systems within the control area to prevent contamination and dust dispersal to other areas of the structure. During the Work, vents within the immediate removal area (to a distance of ten feet from the affected surface) shall be sealed with tape and plastic sheeting and as shown on plans.
 2. **Loose equipment:** Do not begin Work until immediate work area is free of loose equipment.
 3. **Pre-clean:** Pre-clean fixed objects within the proposed Work Areas using HEPA filtered vacuum equipment and/or protect occupants' belongings by covering with one layer of six mil polyethylene and have joints taped. All debris gathered during this clean up shall be disposed of properly. In addition, any loose paint or paint bearing debris found in the buildings are to be assumed hazardous and packaged and disposed of properly. The amount of the materials should be estimated during the pre-bid walk through.

4. **Use of a mini-containment:** At the Owner's and consultant's approval, the Abatement Subcontractor may utilize a portable mini-isolation chamber to create an isolated work area around single components to be removed. This chamber shall still be equipped with an adjacent clean room, and become an isolated work area sealed at all seams to where it is attached to adjacent surfaces. It shall also satisfy all requirements for a work area and satisfy all clearance criteria, as identified in this section and local law.
5. **Walls and floors:** Lay a single layer of six-mil thick polyethylene sheeting below the impacted area. Sheeting will extend to a distance of six feet beyond the affected area in all direction not bounded by walls or non-moveable partitions. Walls directly below the affected surface will be covered with six-mil thick polyethylene sheeting to extend 4 feet in either direction beyond the affected area.
6. **Surrounding barrier:** A barrier shall be erected at room entrances, which shall be sealed with a single layer of six-mil thick polyethylene sheeting, and a suitable two-stage decontamination unit shall be erected and attached to barrier sheeting.
7. **Maintaining barriers:** The abatement subcontractor shall maintain polyethylene barriers and a clean area as long as needed for the safe and proper completion of the work. Any openings or tears in the work area barriers shall be corrected by the abatement subcontractor at the beginning of each work day and as necessary during the workday with such openings and barriers in place and acceptable to the consultant.
8. **Removal of barriers:** Barriers shall not be removed until the work areas are thoroughly cleaned, and the area approved by the consultant. All debris must be bagged and removed from work areas, and the lead surface wipe samples must have passed final clearance test according to provisions detailed in the barrier removal.
9. **Signs:** Prior to the preparation of the dwelling for abatement, the abatement subcontractor shall place warning signs immediately outside all entrances and exits to the dwelling, warning that abatement work is being conducted in the vicinity. The signs shall be at least 20" x 14" and read:

**WARNING:
LEAD WORK AREA
POISON
UNAUTHORIZED ENTRY PROHIBITED
NO SMOKING, EATING OR DRINKING
ALLOWED IN THE WORK AREA**

10. Signs shall be in bold lettering with lettering not smaller than two inches tall.
11. Maintain emergency and fire exits from Work Areas.
12. Construct and maintain suitable polyethylene barriers within the building to isolate the exterior work area from the interior of the building. Make every effort to maintain a distance of 10 feet from the barrier tape to the closet scheduled point of work within the Work area.

13. Maintain emergency and fire exits from Work Areas.

E. Decontamination Facilities:

Build suitable decontamination facilities described herein, as previously submitted for review, before start of construction.

In all cases, access between contaminated and uncontaminated rooms or areas shall be through an air lock previously defined. Passage between any two rooms within the decontamination facility shall be through an access doorway.

1. Locate decontamination facility as close in proximity to the Work area as possible.
2. Construct a two-stage worker decontamination enclosure system consisting of two totally separate areas to conform to standard Plans found herein and as follows.
 - a. A shower area with two access ways: one to the equipment room and one to the outside area. Plastic, if used, on shower room and adjoining equipment rooms shall be opaque.
 - b. The shower area shall contain at least one room with water for wet wiping of hands and face. Careful attention shall be paid to the shower enclosure to ensure against leaking of any kind.
3. If needed, provide or construct an equipment decontamination area consisting of two totally separate areas as follows:
 - a. A washroom, with access to a designated area of the Work area and access to the holding area.
 - b. A holding area with access to the washroom and access to an uncontaminated area.
4. At entrances and exits and the decontamination facility name of both the shower and equipment decontamination room, a clearly identifiable label shall be affixed that is visible from a distance of 25 feet.

3.2 INTERIM CONTROL METHODS FOR LOOSE AND FLAKY LBP:

- A. Prepare site per paragraph 3.1.
- B. Remove and clean or clean and wrap objects, such as lights and other items not previously sealed off that may interfere with lead removal. Use HEPA vacuum equipment and wet methods during fixture removal to reduce lead dispersal. Wrap removed items in plastic and store for reinstallation upon completion of testing procedures.
- C. **Protection:** Protect all fixtures, grills, lockers, and other non-removable equipment from water. Also, protect painted surfaces and flooring.

D. Scrapping of loose and flaky paint:

1. All surfaces shall be final scrapped following other flaky paint removal methods.
2. The Contractor shall scrape the material in such a manner as to prevent damage to the substrate.
3. The Contractor shall use wet methods during the scrapping process, unless the substrate will result in undo damage from the wetting. If wetting cannot be performed to this condition, scrapping shall be slow and deliberate so as to lessen the distance of travel. In all cases, occasional misting of the immediate area over the drop cloth shall be performed. After scrapping the impacted area, the area shall be thoroughly HEPA vacuumed.
4. Sufficient scrapping of loose and flaky paint for application of lead-bloc or other encapsulation method shall occur when a scrapping blade is drawn across the remaining painted surface with heaviness of hand and no additional paint dislodges from the substrate. Sufficient scrapping is at the discretion of the consultant and/or inspector.

E. Paint Stabilization: Perform paint stabilization process according to Section 2092, Part 3.3.D.

3.3 CLEANUP AND CLEARANCE MONITORING:

Comply with Section 02092HM, Part 3.3, for Cleanup and Clearance Monitoring.

3.4 DISPOSAL OF LEAD-COATED MATERIALS AND LEAD-CONTAMINATED WASTE:

Comply with Section 02092HM, Part 3.4, for Disposal of Lead-Coated Materials and Lead-Contaminated Waste.

3.5 REESTABLISHMENT OF OBJECTS AND SYSTEMS:

Comply with Section 02092HM, Part 3.5 for Reestablishment of Objects and Systems.

END OF SECTION

SECTION 02095HM

LEAD-BASED PAINT REMOVAL (Chemical and Component)

PART 1 - GENERAL

1.1 **SCOPE:**

This Specification covers the abatement of materials coated with lead-based paint as described in Section 01010HM, Scope of Work.

1.2 **DESCRIPTION OF WORK:**

- A. **The Work:** The Work specified herein shall be the removal of those materials coated with lead-based paint by persons knowledgeable, qualified, and trained in the removal, treatment, handling, and disposal of lead-based paint, and the subsequent cleaning of the affected environment, and who comply with Federal and State and Local regulations and guidelines which mandate work practices, and who are capable of performing the Work of this Contract.
- B. **Contract Fulfillment:** The Contractor shall supply all labor, materials, equipment, services, insurance, and incidentals which are necessary or required to perform the Work in accordance with applicable governmental regulations and guidelines and these Specifications.

1.3 **TERMINOLOGY:**

See Section 02092HM, Part 1.3, for Terminology.

1.4 **APPLICABLE DOCUMENTS:**

Comply with Section 02092HM, Part 1.4, for Applicable Documents.

1.5 **SUBMITTALS AND NOTICES:**

Comply with Section 02092HM, Part 1.5, for Submittals and Notices.

1.6 **PERSONAL PROTECTION AND SAFETY:**

Comply with Section 02092HM, Part 1.6. It shall be modified in the following particulars only.

A. **Respiratory protection requirements:**

1. Disposable (single use) respirators are not to be worn for protection against lead.

2. For the followings tasks or conditions a 1/2 mask air-purifying respirators equipped with high efficiency filters may be used:
 - a. Provided maximum airborne lead concentration outside the respirator is at or below 500 $\mu\text{g}/\text{m}^3$:
 - b. During component removal were LBP dust is not generated.
 - c. During chemical removal. Suitable air-filter cartridges for use with chemicals must be employed.
 - d. Pre-construction sealing of openings and penetrations to the work areas with plastic sheeting.
 - e. Decontamination of removable items.
 - f. During removal of lead-containing materials.
 - g. During all cleanup and wipe down of area.
 - h. During final wipe down of work space
 - i. Loading lead-containing drums onto truck for transportation and unloading bags at approved landfill.
3. A full facepiece, powered air-purifying respirator equipped with HEPA filters will be required under the following conditions:
 - a. At any time that air monitoring levels indicate that lead concentrations are at least 500 $\mu\text{g}/\text{m}^3$ or greater.
 - b. Any situation where gross contamination has occurred, air sampling indicates airborne lead levels have exceeded 500 $\mu\text{g}/\text{m}^3$.
4. All Employees and visitors will wear appropriate filters for the work at hand. If chemicals are used, follow manufacturer guidelines for appropriate personal and respiratory protection.

B. Bilingual Worker protection procedures for chemical removal(Posted in both English and Spanish):

1. Each worker and authorized visitor shall, upon entering the job site: put on a respirator and don two suits of protective clothing before entering the Equipment Room or the Work area. Clothing that is appropriate for weather and temperature conditions is worn under the protective clothing.
2. Each time before leaving the work area, all workers and authorized visitors shall remove gross contamination from the protective clothing using a HEPA vacuum, then remove the top protective suit and place within a labeled hazardous material 6-mil plastic bag which is within the work area. Personnel will then proceed to the Equipment Room and remove remaining protective clothing except respirators by

carefully rolling down the garment to reduce exposure to dust. Personnel will then proceed through to the washroom and clean the outside of the respirator with a wet disposable towel; remove the respirator; and thoroughly wet wipe themselves

3. Following wet wiping and drying off, each Worker shall proceed directly to the outside area at the end of each day's Work, or before eating, smoking, or drinking.
4. Before re-entering the Work Area each Worker and authorized visitor shall put on a clean respirator and shall dress in clean protective clothing as described above.
5. Contaminated work footwear shall be stored in the Equipment Room or Work area in a labeled 6-mil bag when not in use in the Work area, until they are appropriately decontaminated. Upon completion of lead abatement, dispose of footwear as contaminated waste unless they can be appropriately decontaminated. All porous type footwear will be disposed of as contaminated waste.
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. Workers shall not eat, drink, smoke, or chew gum or tobacco while in the Work area.
8. Workers shall be fully protected with respirators and protective clothing from the time of first disturbance of lead-coated or contaminated materials prior to commencing actual lead abatement and until final cleanup is completed.

C. Bilingual Worker protection procedures for component removal(Posted in both English and Spanish):

1. Each worker and authorized visitor shall, upon entering the job site: put on a respirator and don one suit of protective clothing before entering the Equipment Room or the Work area. Clothing that is appropriate for weather and temperature conditions is worn under the protective clothing.
2. Each time before leaving the work area, all workers and authorized visitors shall remove gross contamination from the protective clothing using a HEPA vacuum, then remove protective clothing except respirators by carefully rolling down the garment to reduce exposure to dust and place within a labeled hazardous material 6-mil plastic bag which is within the work area. Personnel will then proceed through to the washroom and clean the outside of the respirator with a wet disposable towel; remove the respirator; and thoroughly wet wipe themselves
3. Following wet wiping, each Worker shall proceed directly to the outside area at the end of each day's Work, or before eating, smoking, or drinking.
4. Before re-entering the Work Area each Worker and authorized visitor shall put on a clean respirator and shall dress in clean protective clothing as described above.

5. Contaminated work footwear shall be stored in the Equipment Room or Work area in a labeled 6-mil bag when not in use in the Work area, until they are appropriately decontaminated. Upon completion of lead work, dispose of footwear as contaminated waste unless they can be appropriately decontaminated. All porous type footwear will be disposed of as contaminated waste.
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. Workers shall not eat, drink, smoke, or chew gum or tobacco while in the Work area.
8. Workers shall be fully protected with respirators and protective clothing from the time of first disturbance of lead-coated or contaminated materials prior to commencing actual lead abatement and until final cleanup is completed.

1.7 SUPERINTENDENT, FOREMAN, CRAFTSMAN:

Comply with Section 02092HM, Part 1.7, Superintendent, Foreman, Craftsman.

PART 2 - MATERIAL AND EQUIPMENT

Comply with Section 02092HM, Part 2. It shall be modified in the following particulars only.

2.1 MATERIALS:

- A. **Chemical removers:** Shall not contain methylene chloride. Chemical removers shall be compatible with and not harm the substrate they are applied to. Chemical removers used on masonry surfaces shall contain anti-stain formulation that inhibits the discoloration of stone, granite, brick, and other masonry construction. Chemical removers used on interior surfaces shall not raise or discolor the surface being abated. Chemical removers requiring neutralizers shall not be used on interior surfaces.
- B. **Chemical stripping agent neutralizers:** May be used on exterior surfaces only. Neutralizers shall be compatible with and not harm the substrate to which they are applied. Neutralizers shall be compatible with the stripping agent that has been applied to the surface substrate.

PART 3 - EXECUTION

3.1 PREPARATION:

A. For exterior work, the abatement contractor shall prepare the area as follows:

1. **Doors and Windows:** Doors and windows on the side of the building upon which a dust-generating method is being used, and on the same floor and all floors below, must be covered with 6-mil thick polyethylene sheeting.
2. **Plants and ground:** The ground and any plants or shrubs in the area in which exterior abatement is occurring shall be covered with two layers of 6-mil plastic in a tarp-like fashion, sufficiently bonded together to form a single layer, and weighted at all edges so as to prevent blowing. A single 12-mil plastic sheet may be substituted. Such covering shall cover from the side of the structure to a point at least eight feet away from the structure for every story in height (10'). The covering shall be taped or otherwise attached to the structure.
3. Ground covers shall always be placed in manner that traps all debris and water. This is best accomplished by elevating the edges.
4. The plastic ground cover shall be properly disposed of and not re-used.
5. **Special Areas:** Any abatement project being performed on any structure other than a building shall be arranged, equipped, and operated in a manner which will eliminated the possibility of lead contaminates or lead contaminated materials escaping from the work.
6. **Maintain Barriers:** The abatement subcontractor shall maintain polyethylene barriers and a clean area as long as needed for the safe and proper completion of the work. Any openings or tears in the work area barriers shall be corrected by the abatement subcontractor at the beginning of each work day and as necessary during the workday with such openings and barriers in place and acceptable to the owner's consultant.
7. **Prior to barrier removal:** Barriers shall not be removed until the work areas are thoroughly cleaned and the area approved by the consultant. All debris must be bagged and removed from work areas, and the lead surface wipe samples must have passed final clearance test, in accordance with provisions detailed in the barrier removal.
8. **Use of mini-isolation chamber:** At the Owner's and consultant's approval, the Abatement Subcontractor may utilize a portable mini-isolation chamber to create an isolated work area around single components to be removed. This chamber shall still be equipped with an adjacent clean room, and become an isolated work area sealed at all seams to where it is attached to adjacent surfaces. It shall also satisfy all requirements for a work area and satisfy all clearance criteria, as identified in this section and local law.

9. **Signs:** Prior to the preparation of the dwelling for abatement, the abatement subcontractor shall place warning signs immediately outside all entrances and exits to the dwelling, warning that abatement work is being conducted in the vicinity. The signs shall be at least 20" x 14" and read

**WARNING:
LEAD WORK AREA
POISON
UNAUTHORIZED ENTRY PROHIBITED
NO SMOKING, EATING OR DRINKING
ALLOWED IN THE WORK AREA**

10. Signs shall be in bold lettering with lettering not smaller than two inches tall.
 11. Construct and maintain suitable polyethylene barriers within the building to isolate the exterior work area from the interior of the building. Make every effort to maintain a distance of 25 feet from the barrier tape to the closet scheduled point of work within the Work area.
 12. Maintain emergency and fire exits from Work Areas.
- B. For interior work, the abatement contractor shall prepare the area as follows:
1. **HVAC shut down:** Shut down or isolate heating, cooling, ventilation air systems within the control area to prevent contamination and dust dispersal to other areas of the structure. During the Work, vents within the immediate removal area (to a distance of ten feet from the affected surface) shall be sealed with tape and plastic sheeting and as shown on plans.
 2. **Loose equipment:** Do not begin Work until immediate work area is free of loose equipment.
 3. **Pre-clean:** Pre-clean fixed objects within the proposed Work Areas, using HEPA filtered vacuum equipment and/or protect occupants' belongings by covering with one layer of six mil polyethylene and have joints taped. All debris gathered during this clean up shall be disposed of properly. In addition, any loose paint or paint bearing debris found in the buildings are to be assumed hazardous and packaged and disposed of properly. The amount of the materials should be estimated during the pre-bid walk through.
 4. **Use of a mini-containment:** At the Owner's and consultant's approval, the Abatement Subcontractor may utilize a portable mini-isolation chamber to create an isolated work area around single components to be removed. This chamber shall still be equipped with an adjacent clean room, and become an isolated work area sealed at all seams to where it is attached to adjacent surfaces. It shall also satisfy all requirements for a work area and satisfy all clearance criteria, as identified in this section and local law.
 5. **Walls and floors:** Lay a single layer of six-mil thick polyethylene sheeting below impacted area. Sheeting will extend to a distance of six feet beyond the affected area in all directions not bounded by walls or non-moveable partitions. Walls

directly below the affected surface will be covered with six-mil thick polyethylene sheeting to extend 4 feet in either direction beyond the affected area.

6. **Surrounding barrier:** A barrier shall be erected at room entrances, which shall be sealed with a single layer of six-mil thick polyethylene sheeting and a suitable 2 stage decontamination unit, shall be erected and attached to barrier sheeting.
7. **Maintaining barriers:** The abatement subcontractor shall maintain polyethylene barriers and a clean area as long as needed for the safe and proper completion of the work. Any openings or tears in the work area barriers shall be corrected by the abatement subcontractor at the beginning of each work day and as necessary during the workday with such openings and barriers in place and acceptable to the consultant.
8. **Removal of barriers:** Barriers shall not be removed until the work areas are thoroughly cleaned, and the area approved by the consultant. All debris must be bagged and removed from work areas, and the lead surface wipe samples must have passed final clearance test, in accordance with provisions detailed in the barrier removal.
9. **Signs:** Prior to the preparation of the dwelling for abatement, the abatement subcontractor shall place warning signs immediately outside all entrances and exits to the dwelling, warning that abatement work is being conducted in the vicinity. The signs shall be at least 20" x 14" and read:

**WARNING:
LEAD WORK AREA
POISON
UNAUTHORIZED ENTRY PROHIBITED
NO SMOKING, EATING OR DRINKING
ALLOWED IN THE WORK AREA**

10. Signs shall be in bold lettering with lettering not smaller than two inches tall.
11. Maintain emergency and fire exits from Work Areas.
12. Construct and maintain suitable polyethylene barriers within the building to isolate the exterior work area from the interior of the building. Make every effort to maintain a distance of 10 feet from the barrier tape to the closet scheduled point of work within the Work area.
13. Maintain emergency and fire exits from Work Areas.

C. Decontamination Facilities:

Build suitable decontamination facilities described herein, as previously submitted for review, before start of construction.

In all cases, access between contaminated and uncontaminated rooms or areas shall be through an air lock previously defined. Passage between any two rooms within the decontamination facility shall be through an access doorway.

1. Locate decontamination facility as close in proximity to the Work area as possible.
2. Construct a two-stage worker decontamination enclosure system consisting of three totally separate areas to conform to standard Plans bound herein and as follows.
 - a. A shower area with two access ways, one to the equipment room and one to the outside area. Plastic, if used, on shower room and adjoining equipment rooms shall be opaque.
 - b. The shower area shall contain at least one room with water for wet wiping of hands and face. Careful attention shall be paid to the shower enclosure to ensure against leaking of any kind.
3. If needed, provide or construct an equipment decontamination area consisting of two totally separate areas as follows:
 - a. A washroom, with access to a designated area of the Work area and access to the holding area.
 - b. A holding area with access to the washroom and access to an uncontaminated area.
4. The entrances and exits and the decontamination facility name of both the shower and equipment decontamination room will be appropriately labeled and identifiable from a distance of 25 feet.

3.2 LEAD REMOVAL:

- A. Prepare site per paragraph 3.1.
- B. Remove and clean or clean and wrap objects, such as lights and other items not previously sealed off that may interfere with lead removal. Use HEPA vacuum equipment and wet methods during fixture removal to reduce lead dispersal. Wrap removed items in plastic and store for reinstallation upon completion of testing procedures.
- C. Protect all fixtures, grills, lockers and other non-removable equipment from water. Also, protect painted surfaces and flooring.
- D. **Lead-Based Paint Removal (component):**
 1. Care must be taken so that leaded materials are neither burned, nor dusted, nor result in further exposure to workers, residents, children, or observers.
 2. Care shall be taken to avoid damage to adjacent areas during the removal of components to be replaced. The Abatement Subcontractor shall run a utility knife around the edge (score) of the abatement substrate and the adjacent (non-abated)

substrate to cut any bonding between the substrates and thereby eliminate damage.

3. If components to be removed contain gross areas of loose or peeling paint, these areas shall be wet scrapped or HEPA vacuumed prior to removal. The paint chips shall be contained either in the HEPA vacuum or in a separate 6-mil polyethylene bag. Temporary encapsulants used expressly for this purpose are also acceptable.
4. Components that are removed for replacement shall be temporarily wrapped for transport to the dumpster. Care shall be taken when transporting leaded components from the work area to the dumpster. All leaded components shall be sealed in airtight containers from transport to the dumpsite. Once the materials have been transferred, it shall be removed from the container and placed in the lined dumpster.
5. A pry device shall be utilized to carefully remove exterior materials. Remove each component and carefully lower to the ground. Care shall be taken to preserve the integrity of the structural elements of the materials. Continuously control dust utilizing an airless spray or apply a light application of water. Containerization shall be accomplished by removing or flattening all nails to prevent punctures or tearing.

E. Lead-Based Paint Removal (Chemically):

1. Use only chemical removers and neutralizers as outlined in Part 2.1.A & B above.
2. Protect all surrounding non-removal surfaces from chemical exposure.
3. Ensure that the chemical is applied and removed in strict accordance with manufacture instructions.
4. Ensure that damaging of the substrate material is prevented while chemical is being removed from the surface. If damage occurs, contractor will prep the material accordingly for a smooth pre-finishing surface.
5. Ensure that any chemical that falls or loses contact with the removal surface is immediately wiped up.
6. Place all hazardous waste immediately upon removal in appropriate containers per manufacturers and regulatory guidelines.

3.3 CLEANUP AND CLEARANCE MONITORING:

Comply with Section 02092HM, Part 3.3, for Cleanup and Clearance Monitoring.

3.4 DISPOSAL OF LEAD-COATED MATERIALS AND LEAD-CONTAMINATED WASTE:

Comply with Section 02092HM, Part 3.4, for Disposal of Lead-Coated Materials and Lead-Contaminated Waste.

3.5 REESTABLISHMENT OF OBJECTS AND SYSTEMS:

Comply with Section 02092HM, Part 3.5, for Reestablishment of Objects and Systems.

END OF SECTION

**APPEDIX A – LIMITED ASBESTOS INSPECTION REPORT
DATED MAY 06, 2015**



Industrial Hygiene • Air Quality • Lead & Asbestos • Training • Health & Safety

LIMITED ASBESTOS INSPECTION REPORT

Conducted at:

STUDEBAKER ELEMENTARY SCHOOL
DOOR REPLACEMENT PROJECT
11800 HALCOURT AVENUE
NORWALK, CALIFORNIA 90650

Prepared for:

MR. FRANK DIAZ
DIRECTOR OF MAINTENANCE, OPERATIONS AND FACILITIES
LITTLE LAKE CITY SCHOOL DISTRICT
10515 SOUTH PIONEER BOULEVARD
SANTA FE SPRINGS, CALIFORNIA 90670

Prepared by:

EXECUTIVE ENVIRONMENTAL
310 EAST FOOTHILL BOULEVARD, SUITE 200
ARCADIA, CALIFORNIA 91006

Project Number EE 15-Z0187-0083
May 6, 2015

Report assembled by:

Yesenia G. Galeana
Technical Report Writer
Executive Environmental

Report generated/reviewed by:

Tim Galeana, CAC # 98-2470
Senior Project Manager
Executive Environmental

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APPENDICES

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APPENDIX B – SITE DRAWING

LIMITED ASBESTOS INSPECTION REPORT

Project Number: EE 15-Z0187-0083

Client: Little Lake City School District
10515 South Pioneer Boulevard
Santa Fe Springs, California 90670

Site Location: Studebaker Elementary School
Door Replacement Project
11800 Halcourt Avenue
Norwalk, California 90650

Site Use: School Property

Contact Person: Mr. Frank Diaz
Director of Maintenance, Operations and Facilities
Phone: (562) 868-8241, ext. 2197

Inspection Date: March 31, 2015

Inspected By: Mr. Wilson Medina
Certified Site Surveillance Technician, # 98-2346

Report Assembled By: Ms. Yesenia G. Galeana
Technical Report Writer

Report Generated/Reviewed By: Mr. Tim Galeana
Certified Asbestos Consultant, # 98-2470

I. EXECUTIVE SUMMARY

Executive Environmental (EE) provided the services of a Certified Site Surveillance Technician to conduct a limited asbestos inspection of the following buildings: Administration Building, 100 Building, 200 Building, 300 Building, 400 Building, 500 Building and 600 Building at Studebaker Elementary School, located at 11800 Halcourt Avenue, Norwalk, California. The inspection was conducted as a precursor to the upcoming Door Replacement Project. Materials suspected of containing asbestos were sampled and analyzed for the presence of asbestos. Asbestos-Containing Materials (ACM) were identified during this inspection. *This is considered to be a limited inspection. Inspection was limited to materials anticipated to be impacted by the Door Replacement Project, as directed by the client.*

II. SAMPLING METHODOLOGY

A visual inspection of the interior and exterior of the following buildings: Administration Building, 100 Building, 200 Building, 300 Building, 400 Building, 500 Building and 600 Building was conducted prior to the collection of any bulk samples. The visual

inspection was conducted to identify and record the location and condition of the materials to be sampled. Following the visual inspection, bulk material samples of the identified suspect asbestos-containing building materials were collected. The materials were categorized into homogeneous groupings, and each sample was assigned a unique sample number and placed into a sealed container.

Upon completion of the bulk sample collection, a chain of custody was prepared, and the samples were delivered to the laboratory for analysis. Hygeia Laboratories, Incorporated, analyzed the samples using Polarized Light Microscopy (PLM). Hygeia Laboratories is an accredited participant in the National Voluntary Laboratory Accreditation Program (NVLAP), No. 102116-0, and is also accredited by the American Industrial Hygiene Association (AIHA), No. 101658. The principles described in the current Environmental Protection Agency (EPA) 600 method were used in the preparation and analysis of the bulk samples.

Note: Inaccessible, suspect asbestos materials may be located within sealed ceilings, walls, or floors; or within wall cavities, interstitials, shafts, etc. Suspect asbestos materials located in these areas must be sampled prior to any activities that might cause them to be disturbed.

III. SAMPLE ANALYSIS

Sixty (60) suspect asbestos-containing material samples were collected during this inspection. The laboratory analysis results are listed in the following table. Materials determined not to contain asbestos are listed as "No Asbestos Detected" (NAD).

Any material found to contain more than 1% of a known asbestos substance is considered to be an asbestos-containing material (ACM). Materials falling within this category are controlled and must be handled in accordance with the California Occupational Safety & Health Administration (Cal/OSHA), EPA, and South Coast Air Quality Management District (SCAQMD) regulations.

In addition, materials which are characterized as non-ACM by EPA or other local regulatory agencies may fall within the regulatory standards of Cal/OSHA, which further regulates any materials found to contain more than 1/10 of 1%, but 1% or less, of a known asbestos substance as asbestos-containing construction materials (ACCMs). Impacting or handling ACCMs requires special employer registration, documentation, training, and personal protective equipment. When a material is to be impacted, the National Emission Standards for Hazardous Air Pollutants (NESHAPs) regulations require further testing for materials that fall within this category.

The PLM analytical protocol requires each layer of the sample to be analyzed separately. The quantity of analyses will vary based on the number of layers in a sample and whether a "positive stop" is employed. When one sample of a homogeneous area is positive, the remainder of the samples need not be analyzed, because the entire homogeneous area must be considered positive.

Sampling results begin on the next page.

POLARIZED LIGHT MICROSCOPY (PLM) ANALYSIS DATA

Studebaker Elementary School
11800 Halcourt Avenue
Norwalk, California 90650

Homogeneous Material #	Material Description	Material Location	Estimated Quantity	Sample Number	Sample Location	Analytical Results
100 Building^A						
1	Floor tile and mastic	Rooms 101 and 102 (under carpet)	800 Square Feet	1503310083WM-01	Room 101, west	Layer A: NAD ^B
						Layer B: 5% chrysotile
						Layer C: 2% chrysotile
				1503310083WM-02	Room 101, east	Layer A: NAD
						Layer B: 5% chrysotile
						Layer C: 2% chrysotile
1503310083WM-03	Room 102, west	Layer A: NAD				
		Layer B: 5% chrysotile				
		Layer C: 2% chrysotile				
2	Carpet glue	Rooms 101 and 102 (2 nd layer of carpet over floor tile)	800 Square Feet	1503310083WM-04	Room 101, west	NAD
				1503310083WM-05	Room 101, east	NAD
				1503310083WM-06	Room 102, west	NAD
3	Vinyl basecove with glue	Rooms 101 and 102	70 Linear Feet	1503310083WM-07	Room 101, northeast	NAD
				1503310083WM-08	Room 102, west	NAD
				1503310083WM-09	Room 102, southeast	NAD
4	Fire-rated door	Heater room	1 Total	---	---	Assumed

Note: This table must be used in conjunction with the entire report. This document is not to be used for contract bidding and is intended to be used to identify asbestos-containing materials and their locations only.

^A NOTE: 1) Wood door transoms throughout. 2) Interior and exterior perimeter brick walls. 3) Self-stick carpet (1st layer) in classrooms 101 and 102. 4) No fire-rated doors throughout classrooms.

^B NAD = "No Asbestos Detected"

POLARIZED LIGHT MICROSCOPY (PLM) ANALYSIS DATA

Studebaker Elementary School
11800 Halcourt Avenue
Norwalk, California 90650

Homogeneous Material #	Material Description	Material Location	Estimated Quantity	Sample Number	Sample Location	Analytical Results
200 Building^c						
5	Carpet glue	Rooms 201, 202, 203 and 204 (2 nd layer of carpet over floor tile)	3,700 Square Feet	1503310083WM-10	Room 201, southwest	NAD ^d
				1503310083WM-11	Room 202, northwest	NAD
				1503310083WM-12	Room 203, northwest	NAD
6	Floor tile and mastic	Rooms 201, 202, 203 and 204 (under carpet)	3,700 Square Feet	1503310083WM-13	Room 201, southwest	Layer A: NAD
						Layer B: 5% chrysotile
						Layer C: 2% chrysotile
				1503310083WM-14	Room 202, northwest	Layer A: NAD
						Layer B: 5% chrysotile
						Layer C: 2% chrysotile
1503310083WM-15	Room 203, northwest	Layer A: NAD				
		Layer B: 5% chrysotile				
		Layer C: 2% chrysotile				
7	Vinyl basecove with glue	Rooms 201, 202, 203 and 204	150 Linear Feet	1503310083WM-16	Room 201, northwest	NAD
				1503310083WM-17	Room 202, southwest	NAD
				1503310083WM-18	Room 204, southwest	NAD

Note: This table must be used in conjunction with the entire report. This document is not to be used for contract bidding and is intended to be used to identify asbestos-containing materials and their locations only.

^c NOTE: 1) Wood door transoms throughout. 2) Interior and exterior perimeter brick walls. 3) Self-stick carpet (1st layer) throughout classrooms. 4) No fire-rated doors throughout classrooms.

^d NAD = "No Asbestos Detected"

POLARIZED LIGHT MICROSCOPY (PLM) ANALYSIS DATA

Stuebaker Elementary School
11800 Halcourt Avenue
Norwalk, California 90650

Homogeneous Material #	Material Description	Material Location	Estimated Quantity	Sample Number	Sample Location	Analytical Results
300 Building^E						
8	Carpet glue	Rooms 301, 302, 303 and 304 (2 nd layer of carpet over floor tile or mastic)	3,600 Square Feet	1503310083WM-19	Room 303, northwest	NAD ^F
				1503310083WM-20	Room 303, southwest	NAD
				1503310083WM-21	Room 304, southwest	NAD
9	Floor tile and mastic	Rooms 301, 302, 303 and 304 (under carpet) (mastic only in rooms 301 and 302)	3,600 Square Feet	1503310083WM-22	Room 303, northwest	Layer A: NAD
						Layer B: 5% chrysotile
						Layer C: 2% chrysotile
				1503310083WM-23	Room 303, southwest	Layer A: NAD
						Layer B: 5% chrysotile
						Layer C: 2% chrysotile
1503310083WM-24	Room 304, southwest	Layer A: NAD				
		Layer B: 5% chrysotile				
		Layer C: 2% chrysotile				
10	Vinyl basecove with glue	Rooms 301, 302, 303, 304	150 Linear Feet	1503310083WM-25	Room 301, northwest	NAD
				1503310083WM-26	Room 302, southwest	NAD
				1503310083WM-27	Room 304, northwest	NAD

Note: This table must be used in conjunction with the entire report. This document is not to be used for contract bidding and is intended to be used to identify asbestos-containing materials and their locations only.

^E NOTE: 1) Wood door transoms throughout. 2) Interior and exterior perimeter brick walls. 3) Self-stick carpet (1st layer) throughout classroom. 4) No fire-rated doors throughout rooms 300-304.

^F NAD = "No Asbestos Detected"

POLARIZED LIGHT MICROSCOPY (PLM) ANALYSIS DATA

Studebaker Elementary School
11800 Halcourt Avenue
Norwalk, California 90650

Homogeneous Material #	Material Description	Material Location	Estimated Quantity	Sample Number	Sample Location	Analytical Results
400 Building^G						
11	Carpet glue	Rooms 403 and 404 (2 nd layer of carpet over floor tile)	1,800 Square Feet	1503310083WM-28	Room 403, northwest	NAD ^H
				1503310083WM-29	Room 403, southwest	NAD
				1503310083WM-30	Room 404, northwest	NAD
12	Floor tile and mastic	Rooms 400, 403 and 404 (under carpet in rooms 403 and 404)	2,000 Square Feet	1503310083WM-31	Room 403, northwest	Layer A: NAD
						Layer B: 5% chrysotile
						Layer C: 2% chrysotile
				1503310083WM-32	Room 403, southwest	Layer A: NAD
						Layer B: 5% chrysotile
						Layer C: 2% chrysotile
1503310083WM-33	Room 404, northwest	Layer A: NAD				
		Layer B: 5% chrysotile				
		Layer C: 2% chrysotile				
13	Vinyl basecove with glue	Rooms 400, 401, 402, 403, 404	150 Linear Feet	1503310083WM-34	Room 401, southwest	NAD
				1503310083WM-35	Room 402, northwest	NAD
				1503310083WM-36	Room 404, southwest	NAD

Note: This table must be used in conjunction with the entire report. This document is not to be used for contract bidding and is intended to be used to identify asbestos-containing materials and their locations only.

^G NOTE: 1) Wood door transoms throughout. 2) Interior and exterior perimeter brick walls. 3) Self-stick carpet (1st layer) throughout classrooms, over concrete in rooms 401 and 402. 4) No fire-rated doors throughout rooms 400-404.

^H NAD = "No Asbestos Detected"

POLARIZED LIGHT MICROSCOPY (PLM) ANALYSIS DATA

Studebaker Elementary School
11800 Halcourt Avenue
Norwalk, California 90650

Homogeneous Material #	Material Description	Material Location	Estimated Quantity	Sample Number	Sample Location	Analytical Results
500 Building¹						
14	Carpet glue	Rooms 501, 502, 503, 504 (2 nd layer of carpet over floor tile)	3,600 Square Feet	1503310083WM-37	Room 501, southwest	NAD ^J
				1503310083WM-38	Room 502, northwest	NAD
				1503310083WM-39	Room 503, northwest	NAD
15	Floor tile and mastic	Rooms 501, 502, 503, 504 (under carpet)	3,600 Square Feet	1503310083WM-40	Room 501, southwest	Layer A: NAD
						Layer B: 5% chrysotile
						Layer C: 2% chrysotile
				1503310083WM-41	Room 502, northwest	Layer A: NAD
						Layer B: 5% chrysotile
						Layer C: 2% chrysotile
1503310083WM-42	Room 503, northwest	Layer A: NAD				
		Layer B: 5% chrysotile				
		Layer C: 2% chrysotile				
16	Vinyl basecove with glue	Rooms 501, 502, 403, 504	150 Linear Feet	1503310083WM-43	Room 501, northwest	NAD
				1503310083WM-44	Room 502, southwest	NAD
				1503310083WM-45	Room 503, southwest	NAD
17	Fire-rated door	Room 500	1 Total	---	---	Assumed

Note: This table must be used in conjunction with the entire report. This document is not to be used for contract bidding and is intended to be used to identify asbestos-containing materials and their locations only.

¹ NOTE: 1) Wood door transoms throughout. 2) Interior and exterior perimeter brick walls. 3) Self-stick carpet (1st layer) throughout classrooms. 4) No fire-rated doors throughout classrooms.

^J NAD = "No Asbestos Detected"

POLARIZED LIGHT MICROSCOPY (PLM) ANALYSIS DATA

Studebaker Elementary School
11800 Halcourt Avenue
Norwalk, California 90650

Homogeneous Material #	Material Description	Material Location	Estimated Quantity	Sample Number	Sample Location	Analytical Results
600 Building^K						
18	Carpet glue	Rooms 601, 602, 603, 604 (2 nd layer of carpet over floor tile)	3,600 Square Feet	1504010083WM-46	Room 601, southwest	NAD ^L
				1504010083WM-47	Room 602, northwest	NAD
				1504010083WM-48	Room 603, northwest	NAD
19	Floor tile and mastic	Rooms 601, 602, 603, 604 (under carpet)	3,600 Square Feet	1504010083WM-49	Room 601, southwest	Layer A: NAD
						Layer B: 5% chrysotile
						Layer C: 5% chrysotile
				1504010083WM-50	Room 602, northwest	Layer A: NAD
						Layer B: 5% chrysotile
						Layer C: 5% chrysotile
1504010083WM-51	Room 603, northwest	Layer A: NAD				
		Layer B: 5% chrysotile				
		Layer C: 5% chrysotile				
20	Vinyl basecove with glue	Rooms 601, 602, 603, 604	150 Linear Feet	1504010083WM-52	Room 601, northwest	NAD
				1504010083WM-53	Room 602, southwest	NAD
				1504010083WM-54	Room 603, southwest	NAD

Note: This table must be used in conjunction with the entire report. This document is not to be used for contract bidding and is intended to be used to identify asbestos-containing materials and their locations only.

^K NOTE: 1) Wood door transoms throughout. 2) Interior and exterior perimeter brick walls. 3) Self-stick carpet (1st layer) throughout classrooms. 4) No fire-rated doors throughout rooms 600-604.

^L NAD = "No Asbestos Detected"

POLARIZED LIGHT MICROSCOPY (PLM) ANALYSIS DATA

Studebaker Elementary School
11800 Halcourt Avenue
Norwalk, California 90650

Homogeneous Material #	Material Description	Material Location	Estimated Quantity	Sample Number	Sample Location	Analytical Results
Administration Building^M						
21	9"x9" Floor tile and mastic	Lounge, Reception, Health office	1,000 Square Feet	1504010083WM-55	Lounge, east	Layer A: NAD ^N
						Layer B: 5% chrysotile
						Layer C: 5% chrysotile
				1504010083WM-56	Reception, north	Layer A: NAD
						Layer B: 5% chrysotile
						Layer C: 5% chrysotile
				1504010083WM-57	Health office, east	Layer A: NAD
						Layer B: 5% chrysotile
						Layer C: 5% chrysotile
22	Vinyl basecove with glue	Health office	15 Linear Feet	1504010083WM-58	South	NAD
				1504010083WM-59	Southeast	NAD
				1504010083WM-60	Northeast	NAD
23	Fire-rated door	Mechanical room	1 Total	---	---	Assumed

Note: This table must be used in conjunction with the entire report. This document is not to be used for contract bidding and is intended to be used to identify asbestos-containing materials and their locations only.

^M NOTE: 1) Wood door transoms throughout. 2) Interior and exterior perimeter brick walls. 3) Wood tacked carpet with padding, no glue, over 9" floor tile in Lounge and Reception. 4) New 12" blue floor tile over 9" floor tile at Health office.

^N NAD = "No Asbestos Detected"

IV. FINDINGS

EE conducted a limited asbestos inspection of the following buildings: Administration Building, 100 Building, 200 Building, 300 Building, 400 Building, 500 Building and 600 Building at Studebaker Elementary School, located at 11800 Halcourt Avenue, Norwalk, California.

Twenty-three (23) homogeneous material groups were identified during the visual property inspection. Sixty (60) samples of suspect asbestos-containing materials were collected and delivered to Hygeia Laboratories, Incorporated, for analysis. The homogeneous areas and sampling results are listed on the table in Section III.

The analytical data revealed that the following materials contain asbestos:

100 Building:

- Floor tile and mastic: The floor tile and mastic located under two layers of carpet in rooms 101 and 102 tested positive for asbestos content.
- Fire-Rated Door: The fire-rated door located in the heater room is assumed to be asbestos containing.

200 Building:

- Floor tile and mastic: The floor tile and mastic located under two layers of carpet in rooms 201, 202, 203 and 204 tested positive for asbestos content.

300 Building:

- Floor tile and mastic: The floor tile and mastic located under two layers of carpet in rooms 301, 302, 303, 304 (mastic only in rooms 301 and 302) tested positive for asbestos content.

400 Building:

- Floor tile and mastic: The floor tile and mastic located in rooms 400, 403 and 404 (under two layers of carpet in 403 and 404) tested positive for asbestos content.

500 Building:

- Floor tile and mastic: The floor tile and mastic located under two layers of carpet in rooms 501, 502, 503 and 504 tested positive for asbestos content.
- Fire-Rated Door: The fire-rated door located in the room 500 is assumed to be asbestos containing.

600 Building:

- Floor tile and mastic: The floor tile and mastic located under two layers of carpet in rooms 601, 602, 603 and 604 tested positive for asbestos content.

Administration Building:

- **9"x9" Floor tile and mastic:** The 9"x9" floor tile and mastic located under 12" floor tile or carpet in the Lounge, Reception and Health office tested positive for asbestos content.
- **Fire-Rated Door:** The fire-rated door located in the mechanical room is assumed to be asbestos containing.

V. CONCLUSIONS/RECOMMENDATIONS

Normally, asbestos-containing material found to be in good condition is not considered a hazard, unless it is disturbed. Prior to the start of any activity, such as remodeling, demolition, or renovation, that might disturb this material, a Certified Asbestos Consultant should be contracted to design and monitor the project. A California-licensed asbestos contractor should be hired to complete the asbestos abatement procedures.

If you have any questions, please call Mr. Tim Galeana at 626-441-7050. We are glad we could be of service to you.

VI. DISCLAIMER/REPORT LIMITATIONS

All reports and recommendations are based on conditions and practices observed and information made available to Executive Environmental (EE) by the client and the designated sites/facilities on the days sampling was conducted. This report does not purport to set forth all hazards, nor to indicate that other hazards do not exist. No responsibility is assumed by EE for the control or correction of conditions or practices existing at the facilities, or at any other premises surveyed by EE, for and on the behalf of the client. Services provided by EE shall be governed by the standard of practice for professional services measured at the time those services are rendered.

All information contained in this report is proprietary and limited to the scope of services, parameters of the analytical methods used and the conditions present at the time of this inspection. Any references to quantities are considered estimates and are not to be construed as actual.

APPENDIX A – LABORATORY ANALYSIS REPORT



Bulk Sample Analysis Summary

Analytical Method: EPA 600/R-93/116

April 3, 2015

Ms. Yesenia Galeana Executive Environmental Services 310 E. Foothill Blvd., Suite 200 Arcadia, CA 91006		<u>Hygeia Reference No.:</u> Samples Analyzed: 126 Sampler: W. Medina Sample Condition: Acceptable											Date Collected: Mar. 31-Apr. 1, 2015 Date Received: April 2, 2015 Date Analyzed: April 3, 2015			
Client Reference: 15-Z0187-0083		Asbestos Type, %					Non-Asbestos Constituents, %					QC				
Client Sample ID Hygeia Sample ID	Sample Description - color <i>Comments</i>	Asbestos Detected	Chrysotile	Amosite	Crocidolite	Tremolite / Actinolite	Anthophyllite	Other	Cellulose	Fiberglass	Synthetic		Mineral Fillers	Vermiculite	Organic Binders	Foam
1503310083WM-01 1448587A	Mastic - yellow	No										40		60		
1503310083WM-01 1448587B	N/A - tan	Yes	5									70		25		X
1503310083WM-01 1448587C	Mastic - black	Yes	2									38		60		
1503310083WM-02 1448588A	Mastic - yellow	No										40		60		
1503310083WM-02 1448588B	N/A - tan	Yes	5									70		25		
1503310083WM-02 1448588C	Mastic - black	Yes	2									38		60		
1503310083WM-03 1448589A	Mastic - yellow	No										40		60		
1503310083WM-03 1448589B	N/A - tan	Yes	5									70		25		
1503310083WM-03 1448589C	Mastic - black	Yes	2									38		60		
1503310083WM-04 1448590	N/A - grey/yellow	No									20	5	15	60		
1503310083WM-05 1448591	N/A - grey/yellow	No									20	5	15	60		
1503310083WM-06 1448592	N/A - grey/yellow	No									20	5	15	60		
1503310083WM-07 1448593A	N/A - blue	No									60		40			
1503310083WM-07 1448593B	Mastic - tan	No									50		50			
1503310083WM-08 1448594A	N/A - blue	No									60		40			X
1503310083WM-08 1448594B	Mastic - tan	No									50		50			



Bulk Sample Analysis Summary

Analytical Method: EPA 600/R-93/116

April 3, 2015

Client Reference: 15-Z0187-0083		Asbestos Type, %							Non-Asbestos Constituents, %					QC		
Client Sample ID Hygeia Sample ID	Sample Description - color Comments	Asbestos Detected	Chrysotile	Amosite	Crocidolite	Tremolite / Actinolite	Anthophyllite	Other	Cellulose	Fiberglass	Synthetic	Mineral Fillers	Vermiculite		Organic Binders	Foam
1503310083WM-09 1448595A	N/A - blue	No										60		40		
1503310083WM-09 1448595B	Mastic - tan	No										50		50		
1503310083WM-10 1448596	N/A - grey/yellow	No									20	5	15	60		
1503310083WM-11 1448597	N/A - grey/yellow	No									20	5	15	60		
1503310083WM-12 1448598	N/A - grey/yellow	No									20	5	15	60		
1503310083WM-13 1448599A	Mastic - yellow	No										40		60		
1503310083WM-13 1448599B	N/A - tan	Yes	5									70		25		
1503310083WM-13 1448599C	Mastic - black	Yes	2									38		60		
1503310083WM-13 1448600A	Mastic - yellow	No										40		60		
1503310083WM-14 1448600B	N/A - tan	Yes	5									70		25		
1503310083WM-14 1448600C	Mastic - black	Yes	2									38		60		
1503310083WM-14 1448601A	Mastic - yellow	No										40		60		
1503310083WM-15 1448601B	N/A - tan	Yes	5									70		25		
1503310083WM-15 1448601C	Mastic - black	Yes	2									38		60		
1503310083WM-16 1448602A	N/A - blue	No										60		40		
1503310083WM-16 1448602B	Mastic - tan	No										50		50		
1503310083WM-17 1448603A	N/A - blue	No										60		40		
1503310083WM-17 1448603B	Mastic - tan	No										50		50		



Bulk Sample Analysis Summary

Analytical Method: EPA 600/R-93/116

April 3, 2015

Client Reference: 15-Z0187-0083		Asbestos Type, %						Non-Asbestos Constituents, %						QC		
Client Sample ID Hygeia Sample ID	Sample Description - color Comments	Asbestos Detected	Chrysotile	Amosite	Crocidolite	Tremolite / Actinolite	Anthophyllite	Other	Cellulose	Fiberglass	Synthetic	Mineral Fillers	Vermiculite		Organic Binders	Foam
1503310083WM-18 1448604A	N/A - blue	No										60		40		
1503310083WM-18 1448604B	Mastic - tan	No										50		50		
1503310083WM-19 1448605	N/A - grey/yellow	No									20	5		15	60	
1503310083WM-20 1448606	N/A - grey/yellow	No									20	5		15	60	
1503310083WM-21 1448607	N/A - grey/yellow	No									20	5		15	60	X
1503310083WM-22 1448608A	Mastic - yellow	No										40		60		
1503310083WM-22 1448608B	N/A - tan	Yes	5									70		25		
1503310083WM-22 1448608C	Mastic - black	Yes	2									38		60		
1503310083WM-23 1448609A	Mastic - yellow	No										40		60		
1503310083WM-23 1448609B	N/A - tan	Yes	5									70		25		
1503310083WM-23 1448609C	Mastic - black	Yes	2									38		60		
1503310083WM-24 1448610A	Mastic - yellow	No										40		60		
1503310083WM-24 1448610B	N/A - tan	Yes	5									70		25		
1503310083WM-24 1448610C	Mastic - black	Yes	2									38		60		
1503310083WM-25 1448611A	N/A - blue	No										60		40		
1503310083WM-25 1448611B	Mastic - tan	No										50		50		
1503310083WM-26 1448612A	N/A - blue	No										60		40		X
1503310083WM-26 1448612B	Mastic - tan	No										50		50		



Bulk Sample Analysis Summary

Analytical Method: EPA 600/R-93/116

April 3, 2015

Client Reference: 15-Z0187-0083		Asbestos Type, %							Non-Asbestos Constituents, %					QC		
Client Sample ID Hygeia Sample ID	Sample Description - color Comments	Asbestos Detected	Chrysotile	Amosite	Crocidolite	Tremolite / Actinolite	Anthrophyllite	Other	Cellulose	Fiberglass	Synthetic	Mineral Fillers	Vermiculite		Organic Binders	Foam
1503310083WM-27 1448613A	N/A - blue	No										60		40		
1503310083WM-27 1448613B	Mastic - tan	No										50		50		
1503310083WM-28 1448614	N/A - grey/yellow	No										80	15		5	
1503310083WM-29 1448615	N/A - grey/yellow	No										80	15		5	X
1503310083WM-30 1448616	N/A - grey/yellow	No										80	15		5	
1503310083WM-31 1448617A	Mastic - yellow	No										40		60		
1503310083WM-31 1448617B	N/A - tan	Yes	5									75		20		X
1503310083WM-31 1448617C	Mastic - black	Yes	2									38		60		
1503310083WM-32 1448618A	Mastic - yellow	No										40		60		
1503310083WM-32 1448618B	N/A - tan	Yes	5									75		20		
1503310083WM-32 1448618C	Mastic - black	Yes	2									38		60		
1503310083WM-33 1448619A	Mastic - yellow	No										40		60		
1503310083WM-33 1448619B	N/A - tan	Yes	5									75		20		
1503310083WM-33 1448619C	Mastic - black	Yes	2									38		60		
1503310083WM-34 1448620A	N/A - blue	No										60		40		X
1503310083WM-34 1448620B	Mastic - tan	No										40		60		
1503310083WM-35 1448621A	N/A - blue	No										60		40		
1503310083WM-35 1448621B	Mastic - tan	No										40		60		



Bulk Sample Analysis Summary

Analytical Method: EPA 600/R-93/116

April 3, 2015

Client Reference: 15-Z0187-0083		Asbestos Type, %							Non-Asbestos Constituents, %					QC		
Client Sample ID Hygeia Sample ID	Sample Description - color Comments	Asbestos Detected	Chrysotile	Amosite	Crocidolite	Tremolite / Actinolite	Anthophyllite	Other	Cellulose	Fiberglass	Synthetic	Mineral Fillers	Vermiculite		Organic Binders	Foam
1503310083WM-36 1448622A	N/A - blue	No										60		40		
1503310083WM-36 1448622B	Mastic - tan	No										40		60		
1503310083WM-37 1448623A	N/A - grey	No										95		5		
1503310083WM-37 1448623B	N/A - grey/yellow	No									60	20		20		
1503310083WM-38 1448624A	N/A - grey	No										95		5		
1503310083WM-38 1448624B	N/A - grey/yellow	No									60	20		20		
1503310083WM-39 1448625	N/A - grey/yellow	No									60	20		20		
1503310083WM-40 1448626A	Mastic - yellow	No										40		60		
1503310083WM-40 1448626B	N/A - tan	Yes	5									75		20		
1503310083WM-40 1448626C	Mastic - black	Yes	2									38		60		
1503310083WM-41 1448627A	Mastic - yellow	No										40		60		
1503310083WM-41 1448627B	N/A - tan	Yes	5									75		20		
1503310083WM-41 1448627C	Mastic - black	Yes	2									38		60		
1503310083WM-42 1448628A	Mastic - yellow	No										40		60		
1503310083WM-42 1448628B	N/A - tan	Yes	5									75		20		
1503310083WM-42 1448628C	Mastic - black	Yes	5									35		60		
1503310083WM-43 1448629A	N/A - blue	No										60		40		
1503310083WM-43 1448629B	Mastic - white	No										40		60		



Bulk Sample Analysis Summary

Analytical Method: EPA 600/R-93/116

April 3, 2015

Client Reference: 15-Z0187-0083		Asbestos Type, %							Non-Asbestos Constituents, %					QC		
Client Sample ID Hygeia Sample ID	Sample Description - color Comments	Asbestos Detected	Chrysotile	Amosite	Crocidolite	Tremolite / Actinolite	Anthophyllite	Other	Cellulose	Fiberglass	Synthetic	Mineral Fillers	Vermiculite		Organic Binders	Foam
1503310083WM-44 1448630A	N/A - blue	No										60		40		X
1503310083WM-44 1448630B	Mastic - white	No										40		60		
1503310083WM-45 1448631A	N/A - blue	No										60		40		
1503310083WM-45 1448631B	Mastic - white	No										40		60		
1504010083WM-46 1448632	N/A - grey/tan	No									60	20		20		
1504010083WM-47 1448633	N/A - grey/tan	No									60	20		20		
1504010083WM-48 1448634	N/A - grey/tan	No									60	20		20		X
1504010083WM-49 1448635A	N/A - yellow	No										40		60		
1504010083WM-49 1448635B	Mastic - tan	Yes	5									75		20		
1504010083WM-49 1448635C	N/A - black	Yes	5									35		60		
1504010083WM-50 1448636A	Mastic - yellow	No										40		60		
1504010083WM-50 1448636B	N/A - tan	Yes	5									75		20		
1504010083WM-50 1448636C	Mastic - black	Yes	5									35		60		
1504010083WM-51 1448637A	Mastic - yellow	No										40		60		
1504010083WM-51 1448637B	N/A - tan	Yes	5									75		20		X
1504010083WM-51 1448637C	Mastic - black	Yes	5									35		60		
1504010083WM-52 1448638A	N/A - blue	No										60		40		
1504010083WM-52 1448638B	Mastic - white	No										40		60		



Bulk Sample Analysis Summary

Analytical Method: EPA 600/R-93/116

April 3, 2015

Client Reference: 15-Z0187-0083		Asbestos Type, %							Non-Asbestos Constituents, %					QC		
Client Sample ID Hygeia Sample ID	Sample Description - color Comments	Asbestos Detected	Chrysotile	Amosite	Crocidolite	Tremolite / Actinolite	Anthophyllite	Other	Cellulose	Fiberglass	Synthetic	Mineral Fillers	Vermiculite		Organic Binders	Foam
1504010083WM-53 1448639A	N/A - blue	No										60		40		
1504010083WM-53 1448639B	Mastic - white	No										40		60		
1504010083WM-54 1448640A	N/A - blue	No										60		40		X
1504010083WM-54 1448640B	Mastic - white	No										40		60		
1504010083WM-55 1448641A	Mastic - yellow	No										40		60		
1504010083WM-55 1448641B	N/A - tan	Yes	5									75		20		
1504010083WM-55 1448641C	Mastic - black	Yes	5									35		60		
1504010083WM-56 1448642A	Mastic - yellow	No										40		60		
1504010083WM-56 1448642B	N/A - tan	Yes	5									75		20		
1504010083WM-56 1448642C	Mastic - black	Yes	5									35		60		
1504010083WM-57 1448643A	N/A - grey	No										80		20		
1504010083WM-57 1448643B	Mastic - tan	No										40		60		
1504010083WM-57 1448643C	N/A - blue	Yes	5									75		20		
1504010083WM-57 1448643D	Mastic - black	Yes	5									35		60		
1504010083WM-58 1448644A	N/A - blue	No										60		40		
1504010083WM-58 1448644B	Mastic - yellow	No										40		60		
1504010083WM-59 1448645A	N/A - blue	No										60		40		
1504010083WM-59 1448645B	Mastic - yellow	No										40		60		





Bulk Sample Analysis Summary

Analytical Method: EPA 600/R-93/116

April 3, 2015

Client Reference: 15-Z0187-0083		Asbestos Type, %							Non-Asbestos Constituents, %					QC	
		Asbestos Detected	Chrysotile	Amosite	Crocidolite	Tremolite / Actinolite	Anthophyllite	Other	Cellulose	Fiberglass	Synthetic	Mineral Fillers	Vermiculite		Organic Binders
Client Sample ID Hygeia Sample ID	Sample Description - color Comments														
1504010083WM-60 1448646A	N/A - blue	No									60		40		
1504010083WM-60 1448646B	Mastic - yellow	No									40		60		


 Microscopist - Guillermo Hernandez


 Microscopist - Rogelio Casillas

The analyses of the samples in this report were performed using polarized light microscopy using the EPA method 600/R-93/116. The phase abundances provided are visually estimated and expressed as percent area. Total percentage of sample constituents may total greater than 100 due to trace amounts. The limit of detection for this analytical method is less than one percent. In multilayer samples, unless otherwise specified, the asbestos concentration is reported for the layer where asbestos is found. These results lie within the statistical limits of variability calculated for standard reference samples routinely analyzed in the laboratory. On a per sample basis, the accuracy and precision of the results depend on the type of sample and its asbestos content.

Hygeia recommends transmission electron microscopy (TEM) analysis on organically bound bulk materials (eg., vinyl floor tile, mastics, roofing materials, joint compounds) when PLM analysis shows undetectable quantities of asbestos. These materials often contain milled asbestos with fiber diameters and lengths too small to be resolved by the PLM and the analysis may yield a false negative result.

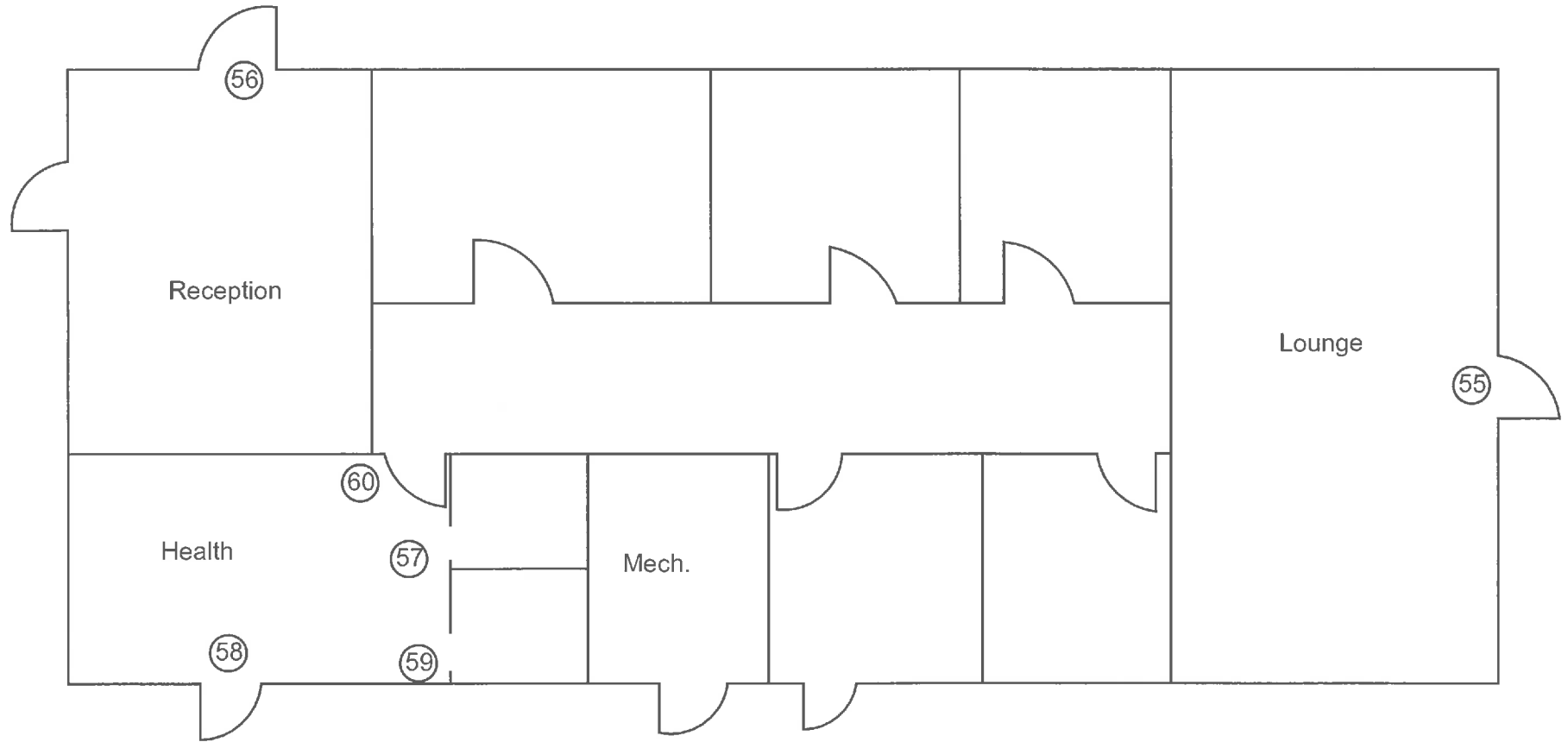
Hygeia Laboratories Inc. is accredited under the NIST/NVLAP program for asbestos in bulk material by polarized light microscopy and the State of California for asbestos analysis.

Hygeia Laboratories Inc. and its personnel shall not be liable for any misinformation provided to us by the client regarding these samples or for any misuse or interpretation of information supplied by us. Liability shall extend to providing replicate analyses only. This report must not be used to claim product endorsement by NVLAP or any agency of the US Government. Hygeia will retain samples for a period of three months unless otherwise specified. This report relates only to samples submitted and analyzed. This report may not be reproduced except for in full, without the written approval of this laboratory. Please feel free to contact Hygeia regarding any questions about these results, this report, or the analytical methods employed.


 Arturo Casas - Supervisor of Optical Microscopy

APPENDIX B – SITE DRAWING

Administration Building



○ - PLM Sample Location



Client: Little Lake City School District

Project #: 15-Z0187-0083

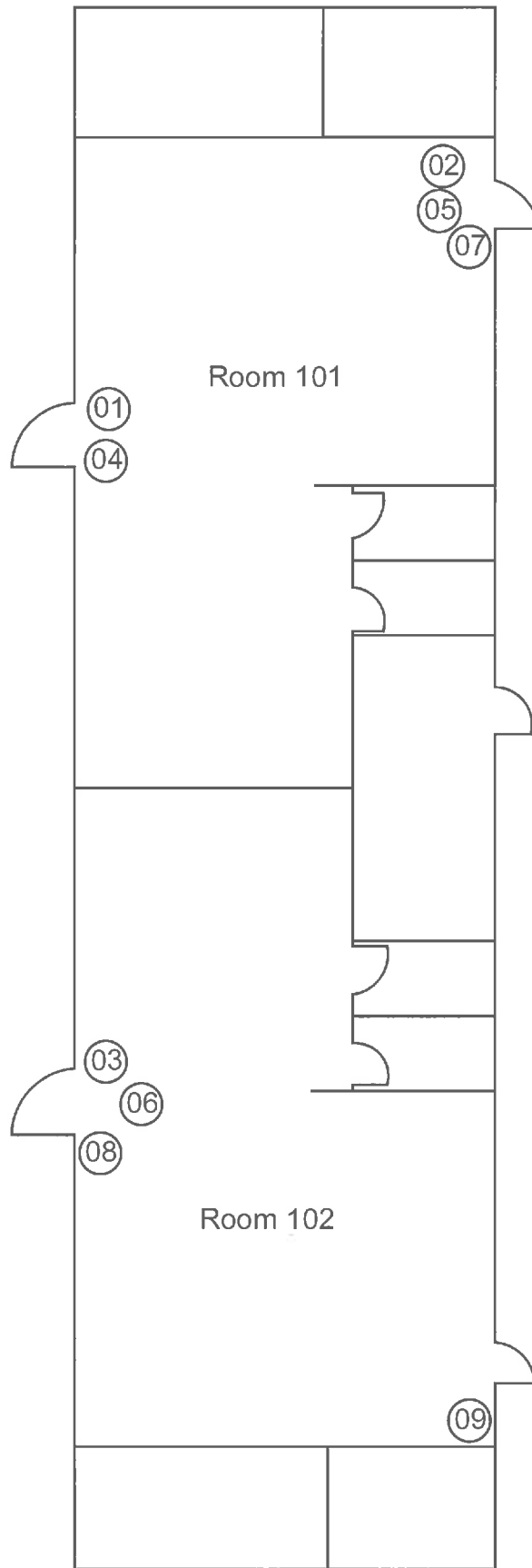
Info: PLM Sample Locations



EXECUTIVE ENVIRONMENTAL
HEALTH & SAFETY SIMPLIFIED

Site: Studebaker ES, Door Replacement Project
Address: 11800 Halcourt Avenue
Norwalk, California 90650

Drawing Not to Scale - © 2012



100 Building

Room 101

Room 102

○ - PLM Sample Location



Client: Little Lake City School District

Project#: 15-Z0187-0083

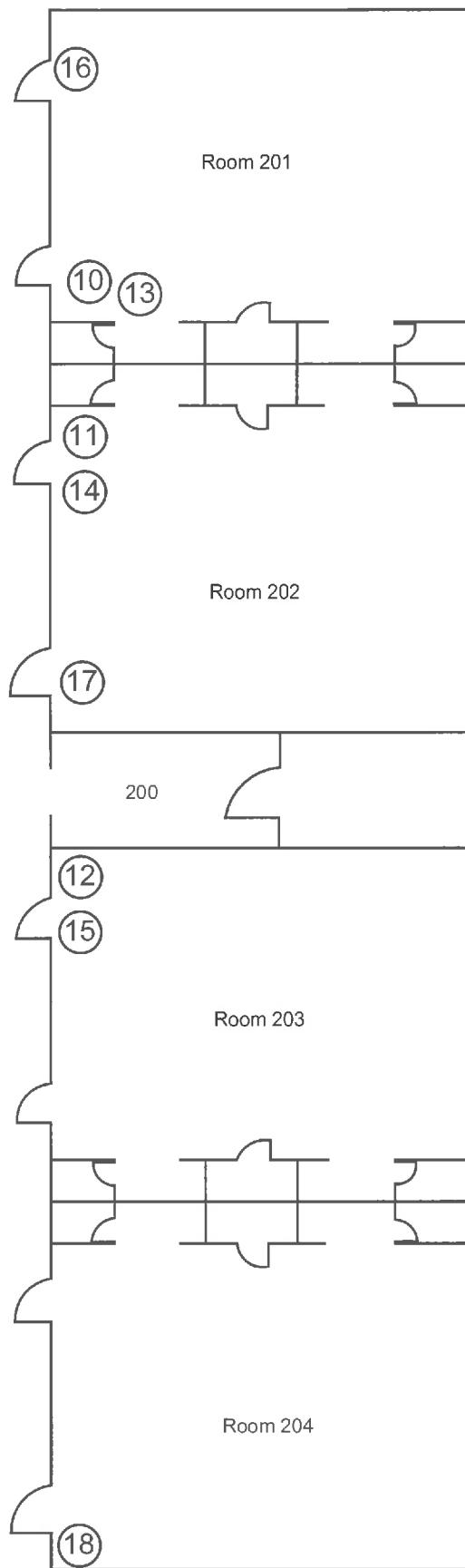
Info: PLM Sample Locations



EXECUTIVE ENVIRONMENTAL
HEALTH & SAFETY SIMPLIFIED

Site: Studebaker ES, Door Replacement Project
Address: 11800 Halcourt Avenue
Norwalk, California 90650

Drawing Not to Scale - © 2012



200 Building

○ - PLM Sample Location



Client: Little Lake City School District

Project#: 15-Z0187-0083

Info: PLM Sample Locations

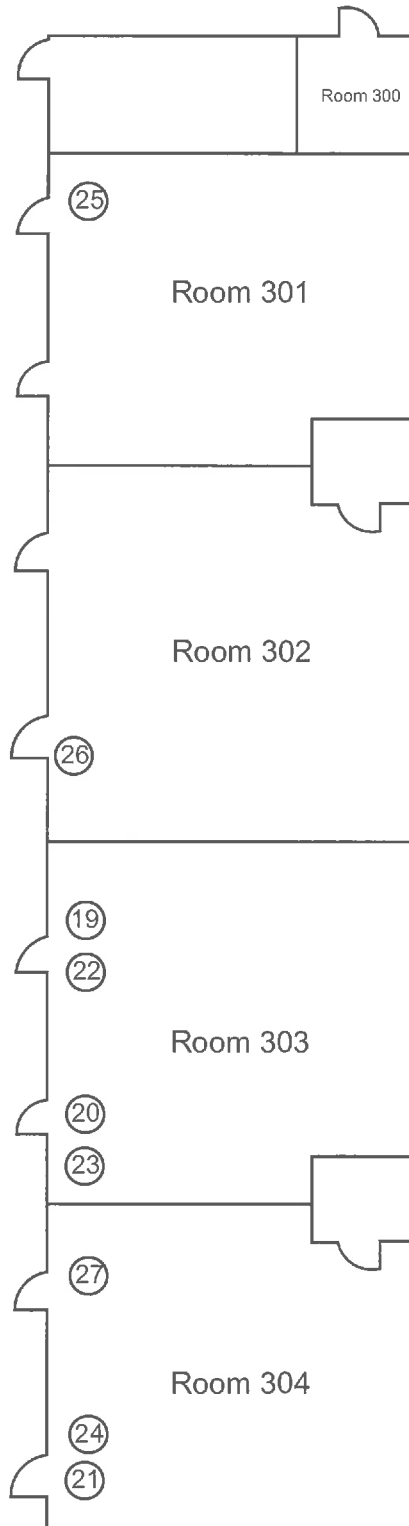


EXECUTIVE ENVIRONMENTAL
HEALTH & SAFETY SIMPLIFIED

Site: Studebaker ES, Door Replacament Project
Address: 11800 Halcourt Avenue
Norwalk, California 90650

Drawing Not to Scale - © 2012

300 Building



○ - PLM Sample Location



Client: Little Lake City School District

Project#: 15-Z0187-0083

Info: PLM Sample Locations

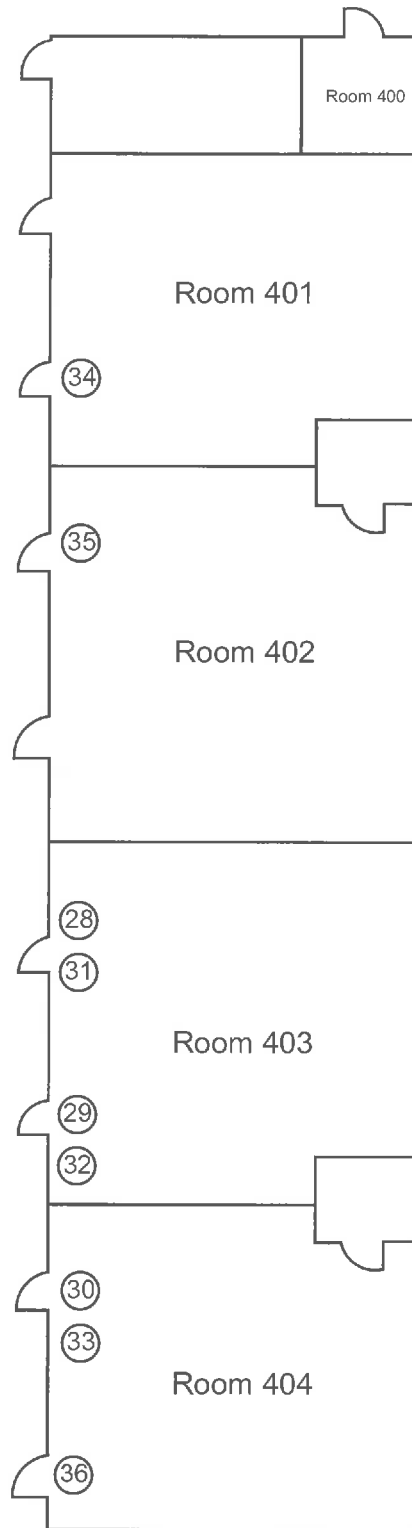


EXECUTIVE ENVIRONMENTAL
HEALTH & SAFETY SIMPLIFIED

Site: Studebaker ES, Door Replacement Project
Address: 11800 Halcourt Avenue
Norwalk, California 90650

Drawing Not to Scale - © 2012

400 Building



○ - PLM Sample Location



Client: Little Lake City School District

Project#: 15-Z0187-0083

Info: PLM Sample Locations

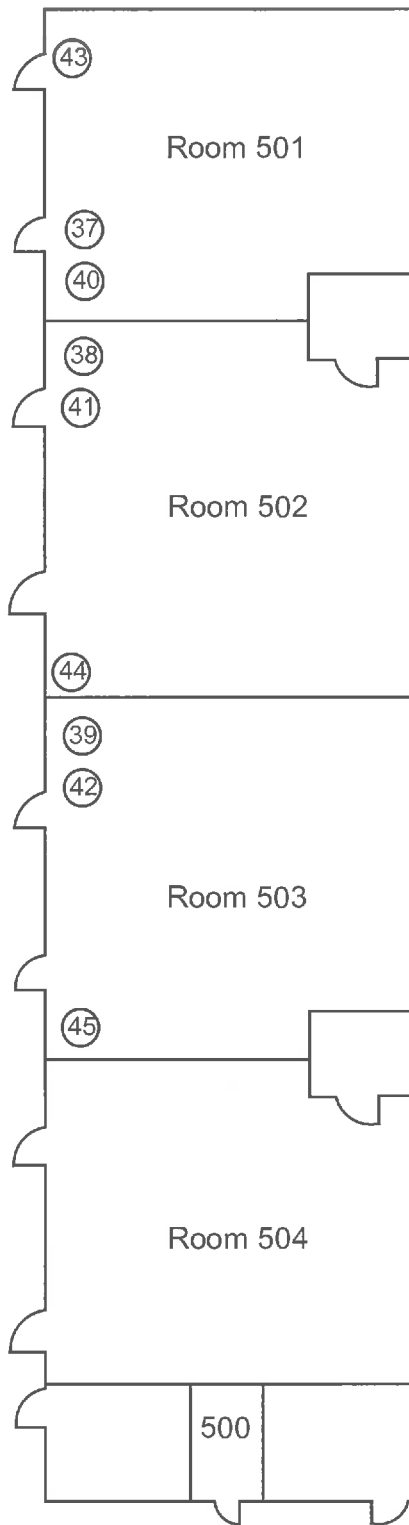


EXECUTIVE ENVIRONMENTAL
HEALTH & SAFETY SIMPLIFIED

Site: Studebaker ES, Door Replacement Project
Address: 11800 Halcourt Avenue
Norwalk, California 90650

Drawing Not to Scale - © 2012

500 Building



○ - PLM Sample Location



Client: Little Lake City School District

Project#: 15-Z0187-0083

Info: PLM Sample Locations

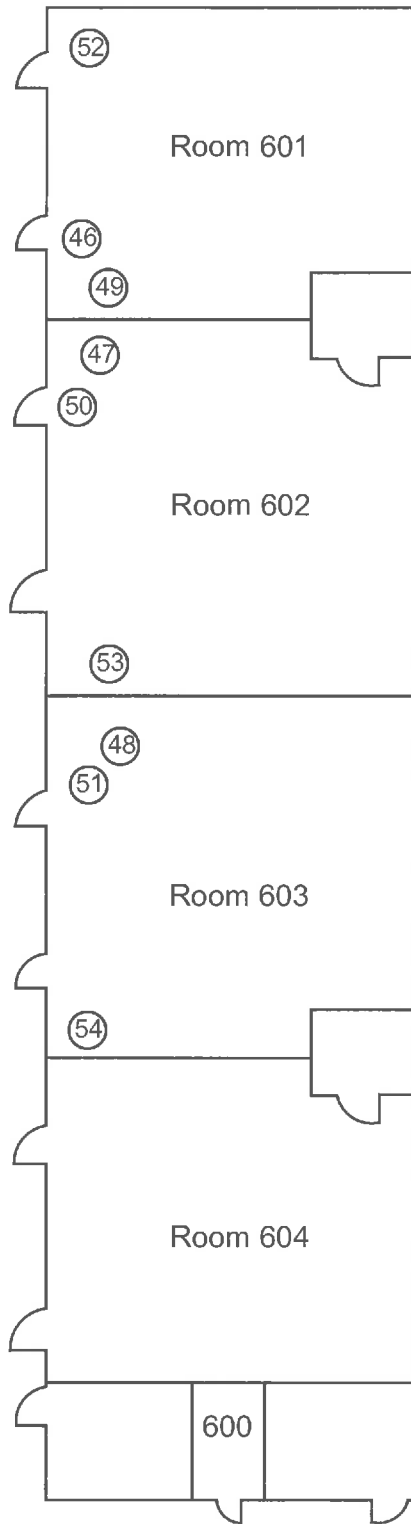


EXECUTIVE ENVIRONMENTAL
HEALTH & SAFETY SIMPLIFIED

Site: Studebaker ES, Door Replacement Project
Address: 11800 Halcourt Avenue
Norwalk, California 90650

Drawing Not to Scale - © 2012

600 Building



○ - PLM Sample Location



Client: Little Lake City School District

Project#: 15-Z0187-0083

Info: PLM Sample Locations



EXECUTIVE ENVIRONMENTAL
HEALTH & SAFETY SIMPLIFIED

Site: Studebaker ES, Door Replacement Project
Address: 11800 Halcourt Avenue
Norwalk, California 90650

Drawing Not to Scale - © 2012

**APPEDIX B – LIMITED LEAD-BASED PAINT INSPECTION REPORT
DATED MAY 06, 2015**



Industrial Hygiene • Air Quality • Lead & Asbestos • Training • Health & Safety

LIMITED LEAD-BASED PAINT INSPECTION REPORT

Conducted at:

STUDEBAKER ELEMENTARY SCHOOL
DOOR REPLACEMENT PROJECT
11800 HALCOURT AVENUE
NORWALK, CALIFORNIA 90650

Prepared for:

MR. FRANK DIAZ
DIRECTOR OF MAINTENANCE, OPERATIONS AND FACILITIES
LITTLE LAKE CITY SCHOOL DISTRICT
10515 SOUTH PIONEER BOULEVARD
SANTA FE SPRINGS, CALIFORNIA 90670

Prepared by:

EXECUTIVE ENVIRONMENTAL
310 EAST FOOTHILL BOULEVARD, SUITE 200
ARCADIA, CALIFORNIA 91006

Project Number EE 15-Z0187-0083
May 6, 2015

Report assembled by:

Yesenia G. Galeana
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Executive Environmental

Report generated/reviewed by:

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Senior Project Manager
Executive Environmental

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LIMITED LEAD-BASED PAINT INSPECTION

Project Number: EE 15-Z0187-0083

Client: Little Lake City School District
10515 South Pioneer Boulevard
Santa Fe Springs, California 90670

Site Location: Studebaker Elementary School
Door Replacement Project
11800 Halcourt Avenue
Norwalk, California 90650

Site Use: School Property

Contact Person: Mr. Frank Diaz
Director of Maintenance, Operations and Facilities
Phone: (562) 868-8241, ext. 2197

Inspection Date: March 31, 2015

Inspected By: Mr. George Valverde
Certified Lead Professional, CDPH # 24605

Report Assembled By: Ms. Yesenia G. Galeana
Technical Report Writer

Report Generated/Reviewed By: Mr. Tim Galeana
Certified Lead Professional, CDPH # 3732

I. EXECUTIVE SUMMARY

Executive Environmental (EE) provided the services of a Certified Lead Professional (CLP) to conduct a limited lead-based paint inspection of the following buildings: Administration Building, 100 Building, 200 Building, 300 Building, 400 Building, 500 Building and 600 Building at Studebaker Elementary School, located at 11800 Halcourt Avenue, Norwalk, California. EE provided a California Department of Public Health Certified Lead Inspector to conduct the inspection. Lead-based paint was detected during this inspection. EE's Certified Lead Professional conducted these services on March 31, 2015. *This is considered to be a limited inspection. The inspection was limited to locations and surfaces anticipated to be impacted by the Door Replacement Project, as directed by the client.*

II. SAMPLING PROTOCOL

According to the United States Department of Housing and Urban Development's (HUD) guideline document, Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing, and Section 1017 of Title X, Residential Lead-Based Paint Hazard

Reduction Act of 1992, Public Law 102-550, paint found to have a lead concentration of at least 1.0 mg/cm² (milligrams per centimeter squared) by X-Ray Fluorescence (XRF) analysis, or 0.5 percent (5000 parts per million) by weight, is regulated as lead-based paint.

Los Angeles County Childhood Lead Poisoning Prevention Program established in 1991, further regulates that paint found to have a lead concentration greater than 0.7 mg/cm² via XRF readings, or 0.06 weight-to-weight percent by Atomic Absorption Spectrometry (AAS) analysis, is considered to be lead-based paint. The Los Angeles County 0.7 mg/cm² action level was used for determining the lead-based paint in this inspection because it is more stringent than the HUD guidelines.

Any material containing any detectable level of lead is subject to the Occupational Safety and Health Administration's (OSHA) Lead Exposure in Construction Rule 29 Code of Federal Regulation (CFR) 1926.62 and California Code of Regulations Title 8, Section 1532.1 Lead (8CCR1532.1) and Title 8, Section 5198, Lead (8CCR5198). All work that disturbs this type of material must be performed in accordance with this and any other applicable standards.

All facilities built prior to 1979 for residential buildings and prior to 1993 for schools are suspect for lead-containing materials. Federal and state regulations recognize only the following methods of identification: analysis by an XRF instrument, paint bulk sample collection and analysis, or a combination of both. This inspection was conducted via XRF instrumentation. The parameters used to interpret the XRF results are outlined in the HUD guidelines and the XRF Performance Characteristics Sheets (PCS).

III. SAMPLING METHODOLOGY

A visual inspection of the interior and exterior of the following buildings: Administration Building, 100 Building, 200 Building, 300 Building, 400 Building, 500 Building and 600 Building was conducted by EE's CLP to identify major site features and surfaces and/or components suspected of being coated with lead-based paint that will be impacted by the door replacement project. After identifying the materials suspected of being coated with lead-based paint, EE grouped the components, substrates, and room equivalents into testing combinations. A testing combination is defined as the room equivalent, component, and substrate. A room equivalent is an identifiable part of a building (e.g., classrooms, restrooms, mechanical rooms, exterior). Color does not accurately indicate painting history, and is not included when assigning testing combinations. If there was any reason to suspect that materials may have been installed or painted at different times even though they appeared uniform, they were assigned to separate testing combinations.

Following the visual inspection, screening for the presence of lead-based paint and/or glaze was performed on-site using a portable XRF instrument. The XRF has the ability to measure lead content in paint and ceramic glaze within the range of 0 to 50 milligrams per centimeter squared (mg/cm²). The on-site inspection capability of the XRF instrument typically reduces the number of paint-chip samples that may need to be collected and sent for laboratory analysis. The portable XRF instrument used in this inspection was manufactured by Niton Corporation.

The following specifications apply to the Niton XRF:

- Ability to report both the K and L shell line x-ray emission energies simultaneously and report the lead concentration in mg/cm².
- Accuracy for a single reading on all building materials within 0.2 mg/cm², at 95 percent confidence, at 0 to 1 mg/cm².
- Equipped with a 40 milli-curie (mCi) cadmium, 109-sealed, radioactive source. Substrate effects are automatically corrected through a complex algorithm and calibration.

IV. SAMPLE ANALYSIS

According to local, state, and federal standards, the following components that were analyzed with the Niton XRF instrument during this inspection are considered to be coated with a regulated lead-based paint.

SAMPLE ANALYSIS DATA Studebaker Elementary School ^A 11800 Halcourt Avenue Norwalk, California 90650				
Area	Component	Substrate	Estimated Quantity	XRF Result Mg/cm ²
100 Building				
Rooms 101 and 102	Perimeter door transom (exterior side)	Wood	32 Square Feet	1.5
200 Building				
Rooms 201, 202, 203, and 204	Perimeter door transom (exterior side)	Wood	64 Square Feet	1.1
300 Building				
Rooms 301, 302, 303, and 304	Perimeter door transom (exterior side)	Wood	64 Square Feet	1.9
400 Building				
Rooms 401, 402, 403, and 404	Perimeter door transom (exterior side)	Wood	64 Square Feet	1.7
500 Building				
Rooms 501, 502, 503, and 504	Perimeter door transom (exterior side)	Wood	64 Square Feet	1.4

Note: This table must be used in conjunction with the entire report.

^A NOTE: 1) 100 Building: no coat on concrete and brick walls and heater room. 2) 300 Building: no coat on concrete floor of custodian room. 3) 400 Building: No coat in room 400. 4) 500 Building: No coat on concrete floor of room 500.

SAMPLE ANALYSIS DATA				
Studebaker Elementary School ^B 11800 Halcourt Avenue Norwalk, California 90650				
Area	Component	Substrate	Estimated Quantity	XRF Result Mg/cm ²
600 Building				
Interior of classroom 600	Perimeter door frame (interior side)	Wood	1 Total	1.9
Rooms 601, 602, 603 and 604	Baseboard	Wood	480 Linear Feet	1
Administration Building				
Reception area	Perimeter door frame (interior side)	Wood	2 Total	1
Reception, Health Office and Lounge	Perimeter door transom (exterior side)	Wood	32 Square Feet	2

Note: This table must be used in conjunction with the entire report.

V. CONCLUSIONS/RECOMMENDATIONS

EE conducted a limited lead-based paint inspection of the following buildings: Administration Building, 100 Building, 200 Building, 300 Building, 400 Building, 500 Building and 600 Building at Studebaker Elementary School, located at 11800 Halcourt Avenue, Norwalk, California. The following conclusions and/or recommendations apply:

Limited Lead-Based Paint Inspection

- Surfaces anticipated to be impacted by the Door Replacement Project were tested via the Niton XRF for the presence of lead-based paint.
- The items listed in the previous tables were identified as being coated with a regulated lead-based paint.
- The components were observed to be in good to fair condition during this inspection.
- A fully representative number of XRF readings were taken at the project site. The results of these assays are presented in the XRF Summary Results spreadsheets.

It is recommended that all renovation, remodeling, construction, or demolition actions that might potentially disturb surfaces covered with lead-based paint or lead-based ceramic glaze be performed by properly trained and qualified personnel.

^B NOTE; 1) 600 Building: no coat on concrete floor of room 600.2) No coat on interior brick wall, concrete floor, electrical components in mechanical room.

VI. DISCLAIMER/REPORT LIMITATIONS

All reports and recommendations are based on conditions and practices observed and information made available to Executive Environmental (EE) by the client and the designated sites/facilities on the days sampling was conducted. This report does not purport to set forth all hazards, nor to indicate that other hazards do not exist. No responsibility is assumed by EE for the control or correction of conditions or practices existing at the facilities, or at any other premises surveyed by EE, for and on the behalf of the client. Services provided by EE shall be governed by the standard of practice for professional services measured at the time those services are rendered.

All information contained in this report is proprietary and limited to the scope of services, parameters of the analytical methods used and the conditions present at the time of this inspection. Any references to quantities are considered estimates and are not to be construed as actual.

APPENDIX A – XRF SUMMARY RESULTS

Little Lake City School District
Studebaker Elementary School

Reading No	Time	Type	Building	Location	Component	Substrate	Side	Condition	Results	PbC	PbC Error	PbL	PbL Error	PbK	PbK Error
1	3/31/15	Paint			Shutter calibrate					4.77	0	0.69	0	0	0
2	3/31/15	Paint			Calibrate				Positive	1.6	0.4	1.6	0.4	1.6	2.1
3	3/31/15	Paint			Calibrate				Positive	1.4	0.3	1.4	0.3	1.5	1.5
4	3/31/15	Paint			Calibrate				Positive	1.6	0.3	1.6	0.3	1.7	1.6
5	3/31/15	Paint	100 Building	Room 101	Door	Metal	B	Intact	Negative	0.07	0.03	0.07	0.03	-0.2	0.51
6	3/31/15	Paint	100 Building	Room 101	Door frame	Wood	B	Intact	Negative	0.25	0.07	0.25	0.07	0.4	0.4
7	3/31/15	Paint	100 Building	Room 101	Wall	Wood	B	Intact	Negative	0.21	0.1	0.21	0.1	0.3	0.44
8	3/31/15	Paint	100 Building	Room 101	Wall	Brick	B	Intact	Negative	0.03	0.03	0.03	0.03	0.3	0.61
9	3/31/15	Paint	100 Building	Room 101	Baseboard	Wood	B	Intact	Negative	0.01	0.03	0.01	0.03	0.6	0.5
10	3/31/15	Paint	100 Building	Room 101	Door	Metal	D	Intact	Negative	0.05	0.03	0.05	0.03	-0.16	0.59
11	3/31/15	Paint	100 Building	Room 101	Door frame	Wood	D	Intact	Negative	0.19	0.12	0.19	0.12	0.3	0.45
12	3/31/15	Paint	100 Building	Room 101	Wall	Brick	D	Intact	Negative	0.06	0.05	0.06	0.05	-0.04	0.75
13	3/31/15	Paint	100 Building	Room 101	Transom	Wood	D	Intact	Negative	0.03	0.04	0.03	0.04	0.6	0.5
14	3/31/15	Paint	100 Building	Room 101	Transom	Wood	D	Intact	Negative	0.09	0.13	0.09	0.13	0.3	0.59

Little Lake City School District
Studebaker Elementary School

Reading No	Time	Type	Building	Location	Component	Substrate	Side	Condition	Results	PbC	PbC Error	PbL	PbL Error	PbK	PbK Error
15	3/31/15	Paint	100 Building	Room 100	Door	Metal	B	Intact	Negative	0.17	0.07	0.17	0.07	-0.09	0.95
16	3/31/15	Paint	100 Building	Room 100	Door frame	Metal	B	Intact	Negative	0.16	0.06	0.16	0.06	0.4	0.9
17	3/31/15	Paint	100 Building	Room 102	Door	Metal	B	Intact	Negative	0.11	0.14	0.11	0.14	-0.33	1.64
18	3/31/15	Paint	100 Building	Room 102	Door frame	Wood	B	Intact	Negative	0.22	0.07	0.22	0.07	0.3	0.46
19	3/31/15	Paint	100 Building	Room 102	Transom	Wood	B	Intact	Negative	0.27	0.09	0.27	0.09	-0.21	0.43
20	3/31/15	Paint	100 Building	Room 102	Wall	Brick	B	Intact	Negative	0.01	0.02	0.01	0.02	-0.06	0.72
21	3/31/15	Paint	100 Building	Room 102	Baseboard	Wood	B	Intact	Negative	0.04	0.05	0.04	0.05	0.13	0.57
22	3/31/15	Paint	100 Building	Room 102	Door	Metal	D	Intact	Negative	0.07	0.04	0.07	0.04	-0.21	0.6
23	3/31/15	Paint	100 Building	Room 102	Door frame	Wood	D	Intact	Negative	0.05	0.06	0.05	0.06	0.09	0.53
24	3/31/15	Paint	100 Building	Room 102	Transom	Wood	D	Intact	Negative	0.11	0.11	0.11	0.11	-0.14	0.58
25	3/31/15	Paint	100 Building	Room 102	Wall	Brick	D	Intact	Negative	0.02	0.02	0.02	0.02	-0.08	0.58
26	3/31/15	Paint	100 Building	Exterior	Wall	Brick	B	Intact	Negative	0.01	0.02	0.01	0.02	0.12	0.76
27	3/31/15	Paint	100 Building	Exterior	Door	Metal	B	Intact	Negative	-0.22	0.54	0.16	0.06	-0.22	0.54
28	3/31/15	Paint	100 Building	Exterior	Door frame	Metal	B	Intact	Negative	0.17	0.08	0.17	0.08	0.4	0.8

Little Lake City School District
Studebaker Elementary School

Reading No	Time	Type	Building	Location	Component	Substrate	Side	Condition	Results	PbC	PbC Error	PbL	PbL Error	PbK	PbK Error
29	3/31/15	Paint	100 Building	Exterior	Door	Metal	B	Intact	Negative	-0.06	0.61	0.08	0.03	-0.06	0.61
30	3/31/15	Paint	100 Building	Exterior	Door frame	Wood	B	Intact	Negative	0.4	0.1	0.4	0.1	0.3	0.42
31	3/31/15	Paint	100 Building	Exterior	Transom	Wood	B	Intact	Positive	1.5	0.4	1.5	0.4	0.9	0.6
32	3/31/15	Paint	100 Building	Exterior	Conduit	Metal	B	Intact	Negative	0	0.02	0	0.02	0.28	1.77
33	3/31/15	Paint	100 Building	Exterior	Wall	Brick	D	Intact	Negative	0	0.02	0	0.02	-0.35	0.87
34	3/31/15	Paint	100 Building	Exterior	Door	Porcelain	D	Intact	Negative	0.18	0.08	0.18	0.08	-0.15	0.72
35	3/31/15	Paint	100 Building	Exterior	Door frame	Wood	D	Intact	Negative	0.21	0.07	0.21	0.07	0.12	0.46
36	3/31/15	Paint	100 Building	Exterior	Door	Metal	D	Intact	Negative	0.11	0.05	0.11	0.05	-0.01	0.79
37	3/31/15	Paint	100 Building	Exterior	Door frame	Wood	D	Intact	Negative	0.24	0.09	0.24	0.09	0.05	0.51
38	3/31/15	Paint	200 Building	Room 201	Door	Metal	D	Intact	Negative	0.12	0.17	0.12	0.17	0	1.7
39	3/31/15	Paint	200 Building	Room 201	Door frame	Wood	D	Intact	Negative	0.18	0.24	0.18	0.24	0.25	0.6
40	3/31/15	Paint	200 Building	Room 201	Transom	Wood	D	Intact	Negative	0.07	0.1	0.07	0.1	-0.2	0.59
41	3/31/15	Paint	200 Building	Room 201	Wall	Brick	D	Intact	Negative	0.08	0.06	0.08	0.06	0.4	0.6
42	3/31/15	Paint	200 Building	Room 201	Baseboard	Wood	D	Intact	Negative	0.03	0.03	0.03	0.03	0.4	0.5

Little Lake City School District
Studebaker Elementary School

Reading No	Time	Type	Building	Location	Component	Substrate	Side	Condition	Results	PbC	PbC Error	PbL	PbL Error	PbK	PbK Error
43	3/31/15	Paint	200 Building	Room 201	Door	Metal	D	Intact	Negative	0.11	0.08	0.11	0.08	-0.01	0.97
44	3/31/15	Paint	200 Building	Room 201	Door frame	Wood	D	Intact	Negative	0.18	0.09	0.18	0.09	0.08	0.36
45	3/31/15	Paint	200 Building	Room 201	Transom	Wood	D	Intact	Negative	0.09	0.11	0.09	0.11	0.07	0.59
46	3/31/15	Paint	200 Building	Room 201	Conduit	Metal	B	Intact	Negative	-0.24	0.6	0.01	0.02	-0.24	0.6
47	3/31/15	Paint	200 Building	Room 202	Door	Metal	D	Intact	Negative	0.09	0.05	0.09	0.05	-0.29	0.69
48	3/31/15	Paint	200 Building	Room 202	Door frame	Wood	D	Intact	Negative	0.06	0.05	0.06	0.05	0.28	0.5
49	3/31/15	Paint	200 Building	Room 202	Transom	Wood	D	Intact	Negative	0.09	0.12	0.09	0.12	-0.49	1.05
50	3/31/15	Paint	200 Building	Room 202	Wall	Brick	D	Intact	Negative	0.09	0.06	0.09	0.06	0.08	0.69
51	3/31/15	Paint	200 Building	Room 202	Baseboard	Wood	D	Intact	Negative	0.09	0.08	0.09	0.08	0.7	0.4
52	3/31/15	Paint	200 Building	Room 202	Door	Metal	D	Intact	Negative	0.1	0.13	0.1	0.13	-0.27	1.66
53	3/31/15	Paint	200 Building	Room 202	Door frame	Wood	D	Intact	Negative	0.15	0.09	0.15	0.09	0.17	0.47
54	3/31/15	Paint	200 Building	Room 202	Transom	Wood	D	Intact	Negative	0.12	0.09	0.12	0.09	-0.36	0.59
55	3/31/15	Paint	200 Building	Room 200	Wall	Brick	D	Intact	Negative	0	0.02	0	0.02	0.04	0.88
56	3/31/15	Paint	200 Building	Room 200	Door	Metal	D	Intact	Negative	0	0.02	0	0.02	-0.4	0.75

Little Lake City School District
Studebaker Elementary School

Reading No	Time	Type	Building	Location	Component	Substrate	Side	Condition	Results	PbC	PbC Error	PbL	PbL Error	PbK	PbK Error
57	3/31/15	Paint	200 Building	Room 200	Door frame	Wood	D	Intact	Negative	0.13	0.05	0.13	0.05	-0.04	0.48
58	3/31/15	Paint	200 Building	Room 200	Conduit	Metal	D	Intact	Negative	0.07	0.08	0.07	0.08	0.18	0.69
59	3/31/15	Paint	200 Building	Room 203	Door	Metal	D	Intact	Negative	0.16	0.13	0.16	0.13	0.27	1.01
60	3/31/15	Paint	200 Building	Room 203	Door frame	Wood	D	Intact	Negative	0.11	0.06	0.11	0.06	0.24	0.39
61	3/31/15	Paint	200 Building	Room 203	Transom	Wood	D	Intact	Negative	0.08	0.06	0.08	0.06	-0.06	0.47
62	3/31/15	Paint	200 Building	Room 203	Wall	Brick	D	Intact	Negative	0.02	0.02	0.02	0.02	-0.14	0.78
63	3/31/15	Paint	200 Building	Room 203	Baseboard	Wood	D	Intact	Null	0.9	0.4	0.14	0.14	0.9	0.4
64	3/31/15	Paint	200 Building	Room 203	Baseboard	Wood	D	Intact	Negative	0.18	0.19	0.18	0.19	0.22	0.65
65	3/31/15	Paint	200 Building	Room 203	Door	Metal	D	Intact	Negative	0.13	0.11	0.13	0.11	-0.32	0.99
66	3/31/15	Paint	200 Building	Room 203	Door frame	Wood	D	Intact	Negative	0.04	0.06	0.04	0.06	-0.09	0.66
67	3/31/15	Paint	200 Building	Room 203	Transom	Wood	D	Intact	Negative	0.11	0.06	0.11	0.06	-0.33	0.37
68	3/31/15	Paint	200 Building	Room 204	Door	Metal	D	Intact	Negative	0.1	0.06	0.1	0.06	-0.05	0.71
69	3/31/15	Paint	200 Building	Room 204	Door frame	Wood	D	Intact	Negative	0.1	0.06	0.1	0.06	0.5	0.4
70	3/31/15	Paint	200 Building	Room 204	Transom	Wood	D	Intact	Negative	0.1	0.08	0.1	0.08	-0.26	0.52

Little Lake City School District
Studebaker Elementary School

Reading No	Time	Type	Building	Location	Component	Substrate	Side	Condition	Results	PbC	PbC Error	PbL	PbL Error	PbK	PbK Error
71	3/31/15	Paint	200 Building	Room 204	Baseboard	Wood	C	Intact	Negative	0.13	0.07	0.13	0.07	0.4	0.5
72	3/31/15	Paint	200 Building	Room 204	Wall	Brick	D	Intact	Negative	0.05	0.05	0.05	0.05	-0.05	0.75
73	3/31/15	Paint	200 Building	Room 204	Door	Metal	D	Intact	Negative	-0.36	0.81	0.22	0.16	-0.36	0.81
74	3/31/15	Paint	200 Building	Room 204	Door frame	Wood	D	Intact	Negative	0.05	0.04	0.05	0.04	0.15	0.59
75	3/31/15	Paint	200 Building	Room 204	Transom	Wood	D	Intact	Negative	0.2	0.28	0.2	0.28	0.4	1
76	3/31/15	Paint	200 Building	Exterior	Wall	Brick	D	Intact	Negative	0.01	0.02	0.01	0.02	0.13	0.55
77	3/31/15	Paint	200 Building	Exterior	Door	Metal	D	Intact	Negative	0.13	0.09	0.13	0.09	-0.37	1
78	3/31/15	Paint	200 Building	Exterior	Door frame	Wood	D	Intact	Negative	0.21	0.19	0.21	0.19	0.25	1.11
79	3/31/15	Paint	200 Building	Exterior	Transom	Wood	C	Intact	Positive	1.1	0.3	1.1	0.3	0.7	0.5
80	3/31/15	Paint	200 Building	Exterior	Door	Metal	D	Intact	Negative	0	0.02	0	0.02	-0.41	0.83
81	3/31/15	Paint	200 Building	Exterior	Door frame	Wood	D	Intact	Negative	0.13	0.05	0.13	0.05	0.17	0.5
82	3/31/15	Paint	200 Building	Exterior	Door	Metal	D	Intact	Negative	0.12	0.07	0.12	0.07	0.28	0.8
83	3/31/15	Paint	200 Building	Exterior	Door frame	Wood	D	Intact	Negative	0.16	0.19	0.16	0.19	0.28	1.13
84	3/31/15	Paint	200 Building	Exterior	Conduit	Metal	D	Intact	Negative	0.01	0.02	0.01	0.02	0.3	1.02

Little Lake City School District
Studebaker Elementary School

Reading No	Time	Type	Building	Location	Component	Substrate	Side	Condition	Results	PbC	PbC Error	PbL	PbL Error	PbK	PbK Error
85	3/31/15	Paint	200 Building	Exterior	Door	Metal	D	Intact	Negative	0.17	0.08	0.17	0.08	-0.23	0.7
86	3/31/15	Paint	200 Building	Exterior	Door frame	Wood	D	Intact	Negative	0.3	0.12	0.3	0.12	-0.03	0.49
87	3/31/15	Paint	200 Building	Exterior	Door	Metal	D	Intact	Negative	0.07	0.04	0.07	0.04	-0.2	0.71
88	3/31/15	Paint	200 Building	Exterior	Door frame	Wood	D	Intact	Negative	0.24	0.1	0.24	0.1	0.09	0.59
89	3/31/15	Paint	300 Building	Room 300	Door	Metal	A	Intact	Negative	0.06	0.05	0.06	0.05	-0.01	1.01
90	3/31/15	Paint	300 Building	Room 300	Door frame	Wood	A	Intact	Negative	0.02	0.04	0.02	0.04	0.07	0.97
91	3/31/15	Paint	300 Building	Room 300	Wall	Brick	A	Intact	Negative	0	0.02	0	0.02	-0.24	0.76
92	3/31/15	Paint	300 Building	Room 301	Door	Metal	D	Intact	Negative	0.12	0.06	0.12	0.06	-0.17	0.73
93	3/31/15	Paint	300 Building	Room 301	Door frame	Wood	D	Intact	Negative	0.08	0.06	0.08	0.06	0.23	0.54
94	3/31/15	Paint	300 Building	Room 301	Toilet	Wood	D	Intact	Negative	0.06	0.08	0.06	0.08	-0.11	0.68
95	3/31/15	Paint	300 Building	Room 301	Wall	Brick	D	Intact	Negative	0.05	0.03	0.05	0.03	0.2	0.68
96	3/31/15	Paint	300 Building	Room 301	Baseboard	Wood	D	Intact	Negative	0.16	0.09	0.16	0.09	0.5	0.4
97	3/31/15	Paint	300 Building	Room 301	Door	Metal	D	Intact	Negative	0.1	0.07	0.1	0.07	-0.39	1
98	3/31/15	Paint	300 Building	Room 301	Door frame	Wood	D	Intact	Negative	0.07	0.04	0.07	0.04	-0.04	0.47

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Reading No	Time	Type	Building	Location	Component	Substrate	Side	Condition	Results	PbC	PbC Error	PbL	PbL Error	PbK	PbK Error
99	3/31/15	Paint	300 Building	Room 301	Transom	Wood	D	Intact	Negative	0.08	0.05	0.08	0.05	-0.32	0.43
100	3/31/15	Paint	300 Building	Room 302	Door	Metal	D	Intact	Negative	0.08	0.05	0.08	0.05	0.21	0.73
101	3/31/15	Paint	300 Building	Room 302	Door frame	Wood	D	Intact	Negative	0.28	0.14	0.28	0.14	0.05	0.44
102	3/31/15	Paint	300 Building	Room 302	Transom	Wood	D	Intact	Negative	0.16	0.25	0.16	0.25	-0.23	0.65
103	3/31/15	Paint	300 Building	Room 302	Wall	Brick	D	Intact	Negative	0.02	0.02	0.02	0.02	0.01	0.77
104	3/31/15	Paint	300 Building	Room 302	Baseboard	Wood	D	Intact	Negative	0.09	0.06	0.09	0.06	0.07	0.41
105	3/31/15	Paint	300 Building	Room 302	Door	Metal	D	Intact	Negative	0.16	0.08	0.16	0.08	-0.17	0.73
106	3/31/15	Paint	300 Building	Room 302	Door frame	Wood	C	Intact	Negative	0.12	0.08	0.12	0.08	-0.36	0.57
107	3/31/15	Paint	300 Building	Room 302	Transom	Wood	D	Intact	Negative	0.1	0.11	0.1	0.11	-0.07	1.11
108	3/31/15	Paint	300 Building	Room 303	Door	Metal	D	Intact	Negative	0.13	0.11	0.13	0.11	-0.48	1.08
109	3/31/15	Paint	300 Building	Room 303	Door frame	Wood	D	Intact	Negative	0.06	0.04	0.06	0.04	0.1	0.4
110	3/31/15	Paint	300 Building	Room 303	Transom	Wood	D	Intact	Negative	0.12	0.07	0.12	0.07	-0.3	0.43
111	3/31/15	Paint	300 Building	Room 303	Wall	Brick	D	Intact	Negative	0.02	0.02	0.02	0.02	0.06	0.74
112	3/31/15	Paint	300 Building	Room 303	Baseboard	Wood	D	Intact	Negative	0.03	0.05	0.03	0.05	0.3	1.01

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Reading No	Time	Type	Building	Location	Component	Substrate	Side	Condition	Results	PbC	PbC Error	PbL	PbL Error	PbK	PbK Error
113	3/31/15	Paint	300 Building	Room 303	Door frame	Metal	D	Intact	Negative	0.2	0.14	0.2	0.14	-0.48	0.94
114	3/31/15	Paint	300 Building	Room 303	Door frame	Wood	D	Intact	Negative	0.06	0.03	0.06	0.03	0.18	0.36
115	3/31/15	Paint	300 Building	Room 303	Transom	Wood	D	Intact	Negative	0.11	0.06	0.11	0.06	-0.34	0.43
116	3/31/15	Paint	300 Building	Room 304	Door	Metal	D	Intact	Negative	0.08	0.06	0.08	0.06	0.18	1.09
117	3/31/15	Paint	300 Building	Room 304	Door frame	Wood	D	Intact	Negative	0.22	0.08	0.22	0.08	0.4	0.4
118	3/31/15	Paint	300 Building	Room 304	Transom	Wood	D	Intact	Negative	0.12	0.1	0.12	0.1	-0.44	0.6
119	3/31/15	Paint	300 Building	Room 304	Wall	Brick	D	Intact	Negative	0.07	0.04	0.07	0.04	-0.16	0.6
120	3/31/15	Paint	300 Building	Room 304	Baseboard	Wood	D	Intact	Negative	0.1	0.11	0.1	0.11	-0.16	0.6
121	3/31/15	Paint	300 Building	Room 304	Door	Metal	D	Intact	Negative	0.1	0.06	0.1	0.06	0.18	0.95
122	3/31/15	Paint	300 Building	Room 304	Door frame	Wood	D	Intact	Negative	0.18	0.1	0.18	0.1	0.23	0.52
123	3/31/15	Paint	300 Building	Room 304	Transom	Wood	D	Intact	Negative	0.11	0.06	0.11	0.06	-0.13	0.46
124	3/31/15	Paint	300 Building	Exterior	Wall	Brick	D	Intact	Negative	0	0.02	0	0.02	-0.04	0.78
125	3/31/15	Paint	300 Building	Exterior	Door	Metal	D	Intact	Negative	-0.35	0.88	0.2	0.11	-0.35	0.88
126	3/31/15	Paint	300 Building	Exterior	Door frame	Wood	D	Intact	Negative	0.17	0.07	0.17	0.07	0.5	0.5

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Reading No	Time	Type	Building	Location	Component	Substrate	Side	Condition	Results	PbC	PbC Error	PbL	PbL Error	PbK	PbK Error
127	3/31/15	Paint	300 Building	Exterior	Transom	Wood	D	Intact	Positive	1.9	0.5	1.9	0.5	1.8	0.7
128	3/31/15	Paint	300 Building	Exterior	Door	Metal	D	Intact	Negative	0.12	0.11	0.12	0.11	0.1	1.68
129	3/31/15	Paint	300 Building	Exterior	Door frame	Wood	D	Intact	Negative	0.21	0.21	0.21	0.21	-0.16	1.26
130	3/31/15	Paint	300 Building	Exterior	Door	Metal	D	Intact	Negative	-0.26	0.76	0.24	0.11	-0.26	0.76
131	3/31/15	Paint	300 Building	Exterior	Door frame	Wood	D	Intact	Negative	0.2	0.15	0.2	0.15	0.05	1.05
132	3/31/15	Paint	300 Building	Exterior	Door	Metal	A	Intact	Negative	-0.51	0.83	0.11	0.06	-0.51	0.83
133	3/31/15	Paint	300 Building	Exterior	Door frame	Wood	A	Intact	Negative	0.14	0.06	0.14	0.06	-0.09	0.44
134	3/31/15	Paint			Calibrate				Positive	1.7	0.4	1.7	0.4	1.4	1.8
135	3/31/15	Paint			Calibrate				Positive	1.6	0.3	1.6	0.3	1.2	1.7
136	3/31/15	Paint			Calibrate				Positive	1.6	0.3	1.6	0.3	0.7	0.9
137	3/31/15	Paint			Shutter calibrate					4.52	0	0.92	0	0.01	0
138	3/31/15	Paint			Calibrate				Positive	1.5	0.3	1.5	0.3	1.6	1.6
139	3/31/15	Paint			Calibrate				Positive	1.6	0.3	1.6	0.3	1.4	0.9
140	3/31/15	Paint			Calibrate				Positive	1.7	0.4	1.7	0.4	0.9	1.6

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Reading No	Time	Type	Building	Location	Component	Substrate	Side	Condition	Results	PbC	PbC Error	PbL	PbL Error	PbK	PbK Error
141	3/31/15	Paint	400 Building	Room 400	Wall	Brick	A	Intact	Negative	0.02	0.02	0.02	0.02	0.28	0.72
142	3/31/15	Paint	400 Building	Room 400	Door	Metal	A	Intact	Negative	0	0.02	0	0.02	-0.64	0.75
143	3/31/15	Paint	400 Building	Room 400	Door frame	Wood	A	Intact	Negative	0.04	0.03	0.04	0.03	0.09	0.46
144	3/31/15	Paint	400 Building	Room 401	Door	Metal	D	Intact	Negative	0.25	0.17	0.25	0.17	0.15	0.97
145	3/31/15	Paint	400 Building	Room 401	Door frame	Wood	D	Intact	Negative	0.09	0.05	0.09	0.05	-0.1	0.48
146	3/31/15	Paint	400 Building	Room 401	Transom	Wood	C	Intact	Negative	0.08	0.07	0.08	0.07	-0.33	0.58
147	3/31/15	Paint	400 Building	Room 401	Wall	Brick	D	Intact	Negative	0.03	0.03	0.03	0.03	-0.33	0.77
148	3/31/15	Paint	400 Building	Room 401	Baseboard	Wood	D	Intact	Negative	0.09	0.1	0.09	0.1	0.13	0.61
149	3/31/15	Paint	400 Building	Room 401	Conduit	Metal	D	Intact	Negative	0	0.02	0	0.02	0.01	0.83
150	3/31/15	Paint	400 Building	Room 401	Tackboard	Wood	D	Intact	Negative	0	0.02	0	0.02	0.05	0.48
151	3/31/15	Paint	400 Building	Room 401	Door	Metal	D	Intact	Negative	0.09	0.06	0.09	0.06	0.12	0.94
152	3/31/15	Paint	400 Building	Room 401	Door frame	Wood	D	Intact	Negative	0.15	0.11	0.15	0.11	0.4	0.6
153	3/31/15	Paint	400 Building	Room 401	Door frame	Wood	D	Intact	Negative	0.14	0.08	0.14	0.08	-0.09	0.53
154	3/31/15	Paint	400 Building	Room 401	Transom	Wood	D	Intact	Negative	0.17	0.13	0.17	0.13	-0.25	0.58

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Reading No	Time	Type	Building	Location	Component	Substrate	Side	Condition	Results	PbC	PbC Error	PbL	PbL Error	PbK	PbK Error
155	3/31/15	Paint	400 Building	Room 402	Door	Metal	D	Intact	Negative	0.14	0.15	0.14	0.15	-0.68	1.74
156	3/31/15	Paint	400 Building	Room 402	Door frame	Wood	D	Intact	Negative	0.13	0.09	0.13	0.09	0.1	0.68
157	3/31/15	Paint	400 Building	Room 402	Transom	Wood	D	Intact	Negative	-0.18	0.52	0.4	0.2	-0.18	0.52
158	3/31/15	Paint	400 Building	Room 402	Wall	Brick	D	Intact	Negative	0.03	0.03	0.03	0.03	-0.2	0.73
159	3/31/15	Paint	400 Building	Room 402	Baseboard	Wood	D	Intact	Negative	0.12	0.06	0.12	0.06	0.09	0.49
160	3/31/15	Paint	400 Building	Room 402	Conduit	Metal	D	Intact	Negative	0	0.02	0	0.02	0.11	0.89
161	3/31/15	Paint	400 Building	Room 402	Door	Metal	D	Intact	Negative	0.1	0.05	0.1	0.05	-0.17	0.74
162	3/31/15	Paint	400 Building	Room 402	Door frame	Wood	D	Intact	Negative	0.05	0.03	0.05	0.03	-0.02	0.43
163	3/31/15	Paint	400 Building	Room 402	Transom	Wood	D	Intact	Negative	0.12	0.1	0.12	0.1	-0.27	0.62
164	3/31/15	Paint	400 Building	Room 403	Door	Metal	D	Intact	Negative	0.14	0.07	0.14	0.07	-0.4	0.82
165	3/31/15	Paint	400 Building	Room 403	Door frame	Wood	D	Intact	Negative	0.05	0.03	0.05	0.03	-0.08	0.5
166	3/31/15	Paint	400 Building	Room 403	Transom	Wood	D	Intact	Negative	0.05	0.05	0.05	0.05	-0.39	0.56
167	3/31/15	Paint	400 Building	Room 403	Wall	Brick	D	Intact	Negative	0.02	0.02	0.02	0.02	-0.05	0.79
168	3/31/15	Paint	400 Building	Room 403	Baseboard	Wood	D	Intact	Negative	0.13	0.19	0.13	0.19	0.3	1.21

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Reading No	Time	Type	Building	Location	Component	Substrate	Side	Condition	Results	PbC	PbC Error	PbL	PbL Error	PbK	PbK Error
169	3/31/15	Paint	400 Building	Room 403	Conduit	Metal	D	Intact	Negative	0	0.02	0	0.02	-0.21	0.96
170	3/31/15	Paint	400 Building	Room 403	Door	Metal	D	Intact	Negative	0.11	0.11	0.11	0.11	-0.07	1.68
171	3/31/15	Paint	400 Building	Room 403	Door frame	Wood	D	Intact	Negative	0.17	0.12	0.17	0.12	-0.17	0.58
172	3/31/15	Paint	400 Building	Room 403	Transom	Wood	D	Intact	Negative	0.07	0.04	0.07	0.04	-0.49	0.41
173	3/31/15	Paint	400 Building	Room 403	Wall	Brick	D	Intact	Negative	0.03	0.03	0.03	0.03	-0.29	0.87
174	3/31/15	Paint	400 Building	Room 404	Door	Metal	D	Intact	Negative	0.19	0.14	0.19	0.14	-0.28	0.93
175	3/31/15	Paint	400 Building	Room 404	Door frame	Wood	D	Intact	Negative	0.3	0.26	0.3	0.26	0	0.76
176	3/31/15	Paint	400 Building	Room 404	Transom	Wood	D	Intact	Negative	0.11	0.17	0.11	0.17	-0.4	1.05
177	3/31/15	Paint	400 Building	Room 404	Wall	Brick	D	Intact	Negative	0.05	0.05	0.05	0.05	-0.45	0.98
178	3/31/15	Paint	400 Building	Room 404	Bookcase	Wood	D	Intact	Negative	0.21	0.07	0.21	0.07	0.4	0.6
179	3/31/15	Paint	400 Building	Room 404	Door	Metal	D	Intact	Negative	0.09	0.13	0.09	0.13	-0.35	1.82
180	3/31/15	Paint	400 Building	Room 404	Door frame	Wood	D	Intact	Negative	0.2	0.11	0.2	0.11	0.17	0.56
181	3/31/15	Paint	400 Building	Room 404	Window frame	Wood	D	Intact	Negative	0.07	0.05	0.07	0.05	-0.51	0.48
182	3/31/15	Paint	400 Building	Room 404	Conduit	Metal	D	Intact	Negative	0.01	0.05	0.01	0.05	0.03	0.85

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Reading No	Time	Type	Building	Location	Component	Substrate	Side	Condition	Results	PbC	PbC Error	PbL	PbL Error	PbK	PbK Error
183	3/31/15	Paint	400 Building	Room 404	Tackboard	Wood	D	Intact	Negative	0.01	0.02	0.01	0.02	0.5	0.4
184	3/31/15	Paint	400 Building	Exterior	Wall	Brick	D	Intact	Negative	0.01	0.02	0.01	0.02	-0.29	0.79
185	3/31/15	Paint	400 Building	Exterior	Door	Metal	D	Intact	Negative	0.12	0.06	0.12	0.06	0.03	0.75
186	3/31/15	Paint	400 Building	Exterior	Door frame	Wood	D	Intact	Negative	0.23	0.08	0.23	0.08	0.4	0.4
187	3/31/15	Paint	400 Building	Exterior	Conduit	Metal	D	Intact	Null	0.07	0.07	0.07	0.07	0.17	0.55
188	3/31/15	Paint	400 Building	Exterior	Conduit	Metal	D	Intact	Negative	0.03	0.05	0.03	0.05	0.25	0.87
189	3/31/15	Paint	400 Building	Exterior	Transom	Wood	D	Intact	Positive	1.7	0.4	1.7	0.4	1.6	0.7
190	3/31/15	Paint	400 Building	Exterior	Door	Metal	D	Intact	Negative	0.2	0.13	0.2	0.13	-0.35	1.01
191	3/31/15	Paint	400 Building	Exterior	Door frame	Wood	D	Intact	Negative	0.4	0.1	0.4	0.1	0.4	0.6
192	3/31/15	Paint	400 Building	Exterior	Door	Metal	D	Intact	Negative	0.09	0.04	0.09	0.04	-0.12	0.7
193	3/31/15	Paint	400 Building	Exterior	Door frame	Wood	D	Intact	Negative	0	0.02	0	0.02	0.16	0.44
194	3/31/15	Paint	400 Building	Exterior	Door	Metal	A	Intact	Negative	0	0.02	0	0.02	-0.4	0.83
195	3/31/15	Paint	400 Building	Exterior	Door frame	Wood	A	Intact	Negative	0.21	0.2	0.21	0.2	0.2	1.13
196	3/31/15	Paint	400 Building	Exterior	Wall	Brick	A	Intact	Negative	0	0.02	0	0.02	-0.15	0.69

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197	3/31/15	Paint	500 Building	Room 500	Wall	Brick	C	Intact	Negative	0.02	0.02	0.02	0.02	-0.27	0.82
198	3/31/15	Paint	500 Building	Room 500	Door	Metal	C	Intact	Negative	0	0.02	0	0.02	-0.3	0.6
199	3/31/15	Paint	500 Building	Room 500	Door frame	Wood	C	Intact	Negative	0.01	0.02	0.01	0.02	-0.05	0.56
200	3/31/15	Paint	500 Building	Room 500	Conduit	Metal	C	Intact	Negative	0	0.02	0	0.02	0.21	1.55
201	3/31/15	Paint	500 Building	Room 500	Pipe	Metal	C	Intact	Negative	-0.26	0.67	0.21	0.18	-0.26	0.67
202	3/31/15	Paint	500 Building	Room 501	Door	Metal	D	Intact	Negative	0.27	0.14	0.27	0.14	-0.29	0.97
203	3/31/15	Paint	500 Building	Room 501	Door frame	Wood	D	Intact	Negative	0.07	0.05	0.07	0.05	-0.14	0.55
204	3/31/15	Paint	500 Building	Room 501	Transom	Wood	D	Intact	Negative	0.08	0.06	0.08	0.06	-0.24	0.6
205	3/31/15	Paint	500 Building	Room 501	Wall	Brick	D	Intact	Negative	0.03	0.02	0.03	0.02	-0.39	0.71
206	3/31/15	Paint	500 Building	Room 501	Baseboard	Wood	D	Intact	Negative	0.13	0.15	0.13	0.15	0.07	0.64
207	3/31/15	Paint	500 Building	Room 501	Conduit	Metal	D	Intact	Negative	0	0.02	0	0.02	0.5	0.9
208	3/31/15	Paint	500 Building	Room 501	Door	Metal	D	Intact	Negative	0.25	0.12	0.25	0.12	-0.19	0.71
209	3/31/15	Paint	500 Building	Room 501	Door frame	Wood	D	Intact	Negative	0.05	0.03	0.05	0.03	-0.02	0.47
210	3/31/15	Paint	500 Building	Room 501	Transom	Wood	D	Intact	Negative	0.13	0.08	0.13	0.08	-0.37	0.58

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Reading No	Time	Type	Building	Location	Component	Substrate	Side	Condition	Results	PbC	PbC Error	PbL	PbL Error	PbK	PbK Error
211	3/31/15	Paint	500 Building	Room 502	Drain	Metal	D	Intact	Negative	0.18	0.09	0.18	0.09	0.12	0.74
212	3/31/15	Paint	500 Building	Room 502	Door frame	Wood	D	Intact	Negative	0.12	0.07	0.12	0.07	0.26	0.63
213	3/31/15	Paint	500 Building	Room 502	Transom	Wood	D	Intact	Negative	0.21	0.1	0.21	0.1	-0.27	0.45
214	3/31/15	Paint	500 Building	Room 502	Baseboard	Wood	D	Intact	Negative	0.14	0.09	0.14	0.09	0.7	0.9
215	3/31/15	Paint	500 Building	Room 502	Wall	Brick	D	Intact	Negative	0.02	0.03	0.02	0.03	-0.45	0.87
216	3/31/15	Paint	500 Building	Room 502	Door	Metal	D	Intact	Negative	0.2	0.12	0.2	0.12	-0.08	0.95
217	3/31/15	Paint	500 Building	Room 502	Door frame	Wood	D	Intact	Negative	0.13	0.12	0.13	0.12	0.11	0.68
218	3/31/15	Paint	500 Building	Room 502	Window frame	Wood	D	Intact	Negative	0.27	0.25	0.27	0.25	-0.26	0.62
219	3/31/15	Paint	500 Building	Room 503	Door	Metal	D	Intact	Negative	0.13	0.06	0.13	0.06	-0.49	0.69
220	3/31/15	Paint	500 Building	Room 503	Door frame	Wood	D	Intact	Negative	0.17	0.1	0.17	0.1	0.02	0.6
221	3/31/15	Paint	500 Building	Room 503	Transom	Wood	D	Intact	Negative	0.23	0.13	0.23	0.13	-0.3	0.52
222	3/31/15	Paint	500 Building	Room 503	Wall	Brick	D	Intact	Negative	0.05	0.04	0.05	0.04	-0.52	0.79
223	3/31/15	Paint	500 Building	Room 503	Baseboard	Wood	D	Intact	Negative	0.08	0.05	0.08	0.05	-0.01	0.5
224	3/31/15	Paint	500 Building	Room 503	Conduit	Metal	D	Intact	Negative	0.01	0.02	0.01	0.02	0.21	0.84

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Reading No	Time	Type	Building	Location	Component	Substrate	Side	Condition	Results	PbC	PbC Error	PbL	PbL Error	PbK	PbK Error
225	3/31/15	Paint	500 Building	Room 503	Door	Metal	D	Intact	Negative	0.22	0.23	0.22	0.23	-0.08	1.88
226	3/31/15	Paint	500 Building	Room 503	Door frame	Wood	D	Intact	Negative	0.08	0.05	0.08	0.05	-0.06	0.51
227	3/31/15	Paint	500 Building	Room 503	Transom	Wood	D	Intact	Negative	0.24	0.17	0.24	0.17	-0.38	0.66
228	3/31/15	Paint	500 Building	Room 504	Door	Metal	D	Intact	Negative	0	0.02	0	0.02	-0.11	0.44
229	3/31/15	Paint	500 Building	Room 504	Door frame	Wood	D	Intact	Null	0.29	0.22	0.29	0.22	0.13	0.6
230	3/31/15	Paint	500 Building	Room 504	Door frame	Wood	D	Intact	Negative	0.1	0.47	0.3	0.2	0.1	0.47
231	3/31/15	Paint	500 Building	Room 504	Transom	Wood	D	Intact	Negative	0.16	0.08	0.16	0.08	-0.17	0.42
232	3/31/15	Paint	500 Building	Room 504	Wall	Brick	D	Intact	Negative	0.04	0.05	0.04	0.05	-0.14	0.77
233	3/31/15	Paint	500 Building	Room 504	Baseboard	Wood	D	Intact	Negative	0.11	0.08	0.11	0.08	0.3	0.58
234	3/31/15	Paint	500 Building	Room 504	Door	Metal	D	Intact	Negative	0.18	0.09	0.18	0.09	0.05	0.98
235	3/31/15	Paint	500 Building	Room 504	Door frame	Wood	D	Intact	Negative	0	0.02	0	0.02	0.09	0.41
236	3/31/15	Paint	500 Building	Room 504	Transom	Wood	D	Intact	Negative	-0.24	0.46	0.23	0.14	-0.24	0.46
237	3/31/15	Paint	500 Building	Exterior	Wall	Brick	C	Intact	Negative	0.01	0.02	0.01	0.02	-0.17	0.81
238	3/31/15	Paint	500 Building	Exterior	Door	Metal	C	Peeling	Negative	0	0.02	0	0.02	-0.15	0.6

Little Lake City School District
Studebaker Elementary School

Reading No	Time	Type	Building	Location	Component	Substrate	Side	Condition	Results	PbC	PbC Error	PbL	PbL Error	PbK	PbK Error
239	3/31/15	Paint	500 Building	Exterior	Door frame	Wood	C	Intact	Negative	0.19	0.17	0.19	0.17	0.27	1.09
240	3/31/15	Paint	500 Building	Exterior	Door frame	Wood	C	Intact	Negative	0	0.02	0	0.02	-0.1	0.53
241	3/31/15	Paint	500 Building	Exterior	Door frame	Wood	C	Intact	Negative	0	0.02	0	0.02	-0.01	1.14
242	3/31/15	Paint	500 Building	Exterior	Wall	Brick	D	Intact	Negative	0.02	0.03	0.02	0.03	-0.26	0.8
243	3/31/15	Paint	500 Building	Exterior	Door	Metal	D	Intact	Negative	-0.45	0.85	0.3	0.15	-0.45	0.85
244	3/31/15	Paint	500 Building	Exterior	Door frame	Wood	D	Intact	Negative	0.25	0.15	0.25	0.15	-0.16	0.56
245	3/31/15	Paint	500 Building	Exterior	Transom	Wood	D	Intact	Positive	1.4	0.4	1.4	0.4	0.8	0.7
246	3/31/15	Paint	500 Building	Exterior	Door	Metal	D	Intact	Negative	-0.5	0.82	0.13	0.07	-0.5	0.82
247	3/31/15	Paint	500 Building	Exterior	Door frame	Wood	D	Intact	Negative	0.22	0.18	0.22	0.18	0	0.71
248	3/31/15	Paint	500 Building	Exterior	Conduit	Metal	D	Intact	Null	0.06	0.09	0.06	0.09	0.23	0.74
249	3/31/15	Paint	500 Building	Exterior	Conduit	Metal	D	Intact	Null	0.7	0.3	0.07	0.05	0.7	0.3
250	3/31/15	Paint	500 Building	Exterior	Conduit	Metal	D	Intact	Null	0.4	0.4	0.4	0.4	0.13	1.63
251	3/31/15	Paint	500 Building	Exterior	Conduit	Metal	D	Intact	Negative	0.23	0.13	0.23	0.13	0.22	1.01
252	3/31/15	Paint	500 Building	Exterior	Door	Metal	D	Intact	Negative	-0.13	0.66	0.23	0.1	-0.13	0.66

Little Lake City School District
Studebaker Elementary School

Reading No	Time	Type	Building	Location	Component	Substrate	Side	Condition	Results	PbC	PbC Error	PbL	PbL Error	PbK	PbK Error
253	3/31/15	Paint	500 Building	Exterior	Door frame	Wood	D	Intact	Negative	0.3	0.33	0.3	0.33	0.06	1.27
254	3/31/15	Paint	500 Building	Exterior	Door	Metal	D	Intact	Negative	-0.1	0.58	0.28	0.08	-0.1	0.58
255	3/31/15	Paint	500 Building	Exterior	Door frame	Wood	D	Intact	Negative	0.4	0.2	0.4	0.2	0.08	0.72
256	3/31/15	Paint			Calibrate				Positive	1.5	0.3	1.5	0.3	1.1	1.7
257	3/31/15	Paint			Calibrate				Positive	1.7	0.4	1.7	0.4	0.7	1.7
258	3/31/15	Paint			Calibrate				Positive	1.5	0.3	1.5	0.3	0.9	0.9
259	4/1/15	Paint			Shutter calibrate					5.41	0	0.78	0	0	0
260	4/1/15	Paint			Calibrate				Positive	1.4	0.3	1.4	0.3	1.2	0.9
261	4/1/15	Paint			Calibrate				Positive	1.6	0.3	1.6	0.3	1.5	0.8
262	4/1/15	Paint			Calibrate				Positive	1.6	0.4	1.6	0.4	1.4	1.9
263	4/1/15	Paint	600 Building	Room 600	Wall	Brick	C	Intact	Negative	0	0.02	0	0.02	0.4	0.8
264	4/1/15	Paint	600 Building	Room 600	Door	Metal	C	Intact	Negative	0.05	0.04	0.05	0.04	-0.18	0.95
265	4/1/15	Paint	600 Building	Room 600	Door frame	Wood	C	Intact	Positive	1.9	0.7	0.6	0.1	1.9	0.7
266	4/1/15	Paint	600 Building	Room 601	Door	Metal	D	Intact	Negative	0.06	0.06	0.06	0.06	-0.26	0.98

Little Lake City School District
Studebaker Elementary School

Reading No	Time	Type	Building	Location	Component	Substrate	Side	Condition	Results	PbC	PbC Error	PbL	PbL Error	PbK	PbK Error
267	4/1/15	Paint	600 Building	Room 601	Door frame	Wood	D	Intact	Negative	0.25	0.19	0.25	0.19	0.26	0.58
268	4/1/15	Paint	600 Building	Room 601	Transom	Wood	D	Intact	Negative	0.6	0.1	0.6	0.1	0.4	0.2
269	4/1/15	Paint	600 Building	Room 601	Conduit	Metal	D	Intact	Negative	0	0.02	0	0.02	-0.02	0.7
270	4/1/15	Paint	600 Building	Room 601	Wall	Brick	D	Intact	Negative	0.04	0.03	0.04	0.03	0.2	0.73
271	4/1/15	Paint	600 Building	Room 601	Baseboard	Wood	D	Intact	Positive	1	0.3	0.03	0.04	1	0.3
272	4/1/15	Paint	600 Building	Room 601	Door	Metal	D	Intact	Negative	0.02	0.02	0.02	0.02	-0.25	0.64
273	4/1/15	Paint	600 Building	Room 601	Door frame	Wood	D	Intact	Negative	0.4	0.1	0.4	0.1	0.6	0.4
274	4/1/15	Paint	600 Building	Room 601	Transom	Wood	D	Intact	Negative	0.4	0.2	0.4	0.2	0.16	0.52
275	4/1/15	Paint	600 Building	Room 602	Door	Metal	D	Intact	Negative	0.1	0.08	0.1	0.08	-0.24	0.67
276	4/1/15	Paint	600 Building	Room 602	Door frame	Wood	D	Intact	Negative	0.16	0.16	0.16	0.16	0.8	1
277	4/1/15	Paint	600 Building	Room 602	Transom	Wood	D	Intact	Negative	0.23	0.11	0.23	0.11	-0.04	0.48
278	4/1/15	Paint	600 Building	Room 602	Wall	Brick	D	Intact	Negative	0.02	0.03	0.02	0.03	0	0.81
279	4/1/15	Paint	600 Building	Room 602	Door	Metal	D	Intact	Negative	0.06	0.05	0.06	0.05	-0.3	0.69
280	4/1/15	Paint	600 Building	Room 602	Door frame	Wood	D	Intact	Negative	0.3	0.17	0.3	0.17	0.7	0.6

Little Lake City School District
Studebaker Elementary School

Reading No	Time	Type	Building	Location	Component	Substrate	Side	Condition	Results	PbC	PbC Error	PbL	PbL Error	PbK	PbK Error
281	4/1/15	Paint	600 Building	Room 602	Transom	Wood	D	Intact	Negative	0.4	0.1	0.4	0.1	0.5	0.5
282	4/1/15	Paint	600 Building	Room 602	Conduit	Metal	D	Intact	Negative	0	0.02	0	0.02	0	0.9
283	4/1/15	Paint	600 Building	Room 603	Door	Metal	D	Intact	Negative	0.03	0.03	0.03	0.03	-0.04	0.76
284	4/1/15	Paint	600 Building	Room 603	Door frame	Wood	D	Intact	Null	0.6	0.2	0.6	0.2	0.7	0.4
285	4/1/15	Paint	600 Building	Room 603	Door frame	Wood	D	Intact	Negative	0.23	0.17	0.23	0.17	0.6	0.6
286	4/1/15	Paint	600 Building	Room 603	Wall	Brick	D	Intact	Negative	0	0.02	0	0.02	0.12	0.9
287	4/1/15	Paint	600 Building	Room 603	Transom	Wood	D	Intact	Negative	0.3	0.14	0.3	0.14	0.13	0.6
288	4/1/15	Paint	600 Building	Room 603	Door	Metal	D	Intact	Negative	0.03	0.02	0.03	0.02	-0.5	0.68
289	4/1/15	Paint	600 Building	Room 603	Door frame	Wood	D	Intact	Negative	0	0.02	0	0.02	0.03	0.94
290	4/1/15	Paint	600 Building	Room 603	Transom	Wood	D	Intact	Negative	0.3	0.17	0.3	0.17	0.18	0.5
291	4/1/15	Paint	600 Building	Room 604	Door	Metal	D	Intact	Negative	0	0.02	0	0.02	0.3	0.42
292	4/1/15	Paint	600 Building	Room 604	Door frame	Wood	D	Intact	Negative	0	0.02	0	0.02	0.24	0.59
293	4/1/15	Paint	600 Building	Room 604	Transom	Wood	D	Intact	Negative	0	0.02	0	0.02	0.4	1.1
294	4/1/15	Paint	600 Building	Room 604	Wall	Brick	D	Intact	Negative	0.02	0.02	0.02	0.02	0.3	0.74

Little Lake City School District
Studebaker Elementary School

Reading No	Time	Type	Building	Location	Component	Substrate	Side	Condition	Results	PbC	PbC Error	PbL	PbL Error	PbK	PbK Error
295	4/1/15	Paint	600 Building	Room 604	Door	Metal	D	Intact	Negative	0	0.02	0	0.02	-0.11	0.63
296	4/1/15	Paint	600 Building	Room 604	Door frame	Wood	C	Intact	Negative	0	0.02	0	0.02	0.23	0.45
297	4/1/15	Paint	600 Building	Room 604	Transom	Wood	D	Intact	Negative	0	0.02	0	0.02	0.19	0.48
298	4/1/15	Paint	600 Building	Exterior	Wall	Brick	C	Intact	Null	0.03	0.13	0.03	0.13	0.8	2.4
299	4/1/15	Paint	600 Building	Exterior	Wall	Brick	C	Intact	Negative	0	0.02	0	0.02	0.27	0.71
300	4/1/15	Paint	600 Building	Exterior	Door	Metal	C	Intact	Negative	0.1	0.13	0.1	0.13	-0.25	1.76
301	4/1/15	Paint	600 Building	Exterior	Door frame	Wood	C	Poor	Negative	0.11	0.07	0.11	0.07	0.6	0.5
302	4/1/15	Paint	600 Building	Exterior	Conduit	Metal	C	Intact	Negative	0.15	0.21	0.15	0.21	0.12	0.95
303	4/1/15	Paint	600 Building	Exterior	Wall	Brick	D	Intact	Negative	0.01	0.02	0.01	0.02	0.3	0.76
304	4/1/15	Paint	600 Building	Exterior	Door	Metal	D	Intact	Negative	0	0.02	0	0.02	0.12	0.98
305	4/1/15	Paint	600 Building	Exterior	Door frame	Wood	D	Intact	Negative	0.01	0.02	0.01	0.02	0.6	0.6
306	4/1/15	Paint	600 Building	Exterior	Conduit	Metal	D	Intact	Null	0.01	0.02	0.01	0.02	0.07	0.74
307	4/1/15	Paint	600 Building	Exterior	Conduit	Metal	D	Intact	Negative	0.26	0.42	0.04	0.03	0.26	0.42
308	4/1/15	Paint	600 Building	Exterior	Transom	Wood	D	Intact	Negative	0.07	0.11	0.07	0.11	0.17	0.96

Little Lake City School District
Studebaker Elementary School

Reading No	Time	Type	Building	Location	Component	Substrate	Side	Condition	Results	PbC	PbC Error	PbL	PbL Error	PbK	PbK Error
309	4/1/15	Paint	600 Building	Exterior	Door	Metal	D	Intact	Negative	-0.57	0.76	0.07	0.05	-0.57	0.76
310	4/1/15	Paint	600 Building	Exterior	Door frame	Wood	D	Intact	Negative	0	0.02	0	0.02	0.27	0.28
311	4/1/15	Paint	600 Building	Exterior	Transom	Wood	D	Intact	Null	0.16	0.34	0.16	0.34	-0.07	0.92
312	4/1/15	Paint	600 Building	Exterior	Transom	Wood	D	Intact	Negative	0.07	0.06	0.07	0.06	0.05	0.38
313	4/1/15	Paint	600 Building	Exterior	Door	Metal	D	Intact	Negative	-0.35	0.5	0.09	0.04	-0.35	0.5
314	4/1/15	Paint	600 Building	Exterior	Door frame	Wood	D	Intact	Negative	0.04	0.08	0.04	0.08	0.5	0.5
315	4/1/15	Paint	600 Building	Exterior	Transom	Wood	D	Intact	Negative	0.08	0.06	0.08	0.06	0.13	0.4
316	4/1/15	Paint	600 Building	Exterior	Door	Metal	D	Intact	Negative	0.06	0.04	0.06	0.04	-0.11	0.68
317	4/1/15	Paint	600 Building	Exterior	Door frame	Wood	D	Intact	Negative	0.5	0.2	0.5	0.2	0.6	0.4
318	4/1/15	Paint	600 Building	Exterior	Transom	Wood	D	Intact	Negative	0.06	0.04	0.06	0.04	0.07	0.4
319	4/1/15	Paint	Administration Building	Lounge	Wall	Brick	B	Intact	Negative	0.09	0.04	0.09	0.04	0.6	0.5
320	4/1/15	Paint	Administration Building	Lounge	Door	Metal	B	Intact	Negative	-0.32	0.71	0.12	0.1	-0.32	0.71
321	4/1/15	Paint	Administration Building	Lounge	Door frame	Wood	B	Intact	Negative	0	0.02	0	0.02	0.15	0.51
322	4/1/15	Paint	Administration Building	Lounge	Transom	Wood	B	Intact	Negative	0	0.02	0	0.02	0.08	0.39

Little Lake City School District
Studebaker Elementary School

Reading No	Time	Type	Building	Location	Component	Substrate	Side	Condition	Results	PbC	PbC Error	PbL	PbL Error	PbK	PbK Error
323	4/1/15	Paint	Administration Building	Lounge	Baseboard	Wood	B	Peeling	Negative	0.24	0.32	0.24	0.32	0.9	0.7
324	4/1/15	Paint	Administration Building	Lounge	Tackboard	Wood	B	Intact	Negative	0	0.02	0	0.02	0.4	0.5
325	4/1/15	Paint	Administration Building	Reception	Wall	Brick	A	Intact	Negative	0.2	0.05	0.2	0.05	0.6	0.4
326	4/1/15	Paint	Administration Building	Reception	Door	Metal	A	Intact	Null	0.29	0.13	0.29	0.13	-0.06	0.77
327	4/1/15	Paint	Administration Building	Reception	Door frame	Wood	A	Intact	Positive	1	0.3	0.6	0.1	1	0.3
328	4/1/15	Paint	Administration Building	Reception	Transom	Wood	A	Intact	Negative	0.5	0.1	0.5	0.1	0.6	0.5
329	4/1/15	Paint	Administration Building	Reception	Wall	Brick	D	Intact	Null	0.25	0.09	0.25	0.09	0.5	0.7
330	4/1/15	Paint	Administration Building	Reception	Wall	Brick	D	Intact	Negative	0.23	0.08	0.23	0.08	0.4	0.6
331	4/1/15	Paint	Administration Building	Reception	Baseboard	Wood	D	Intact	Negative	0.27	0.15	0.27	0.15	0.8	0.6
332	4/1/15	Paint	Administration Building	Reception	Door	Metal	D	Intact	Negative	0.03	0.56	0.4	0.1	0.03	0.56
333	4/1/15	Paint	Administration Building	Reception	Transom	Wood	D	Intact	Negative	0.6	0.1	0.6	0.1	0.8	0.3
334	4/1/15	Paint	Administration Building	Reception	Conduit	Metal	D	Intact	Negative	0.02	0.04	0.02	0.04	0.18	0.82
335	4/1/15	Paint	Administration Building	Health office	Wall	Brick	C	Intact	Negative	0.04	0.02	0.04	0.02	0.6	0.5
336	4/1/15	Paint	Administration Building	Health office	Door	Metal	C	Intact	Negative	0.08	0.07	0.08	0.07	-0.61	0.94

Little Lake City School District
Studebaker Elementary School

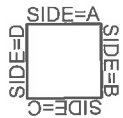
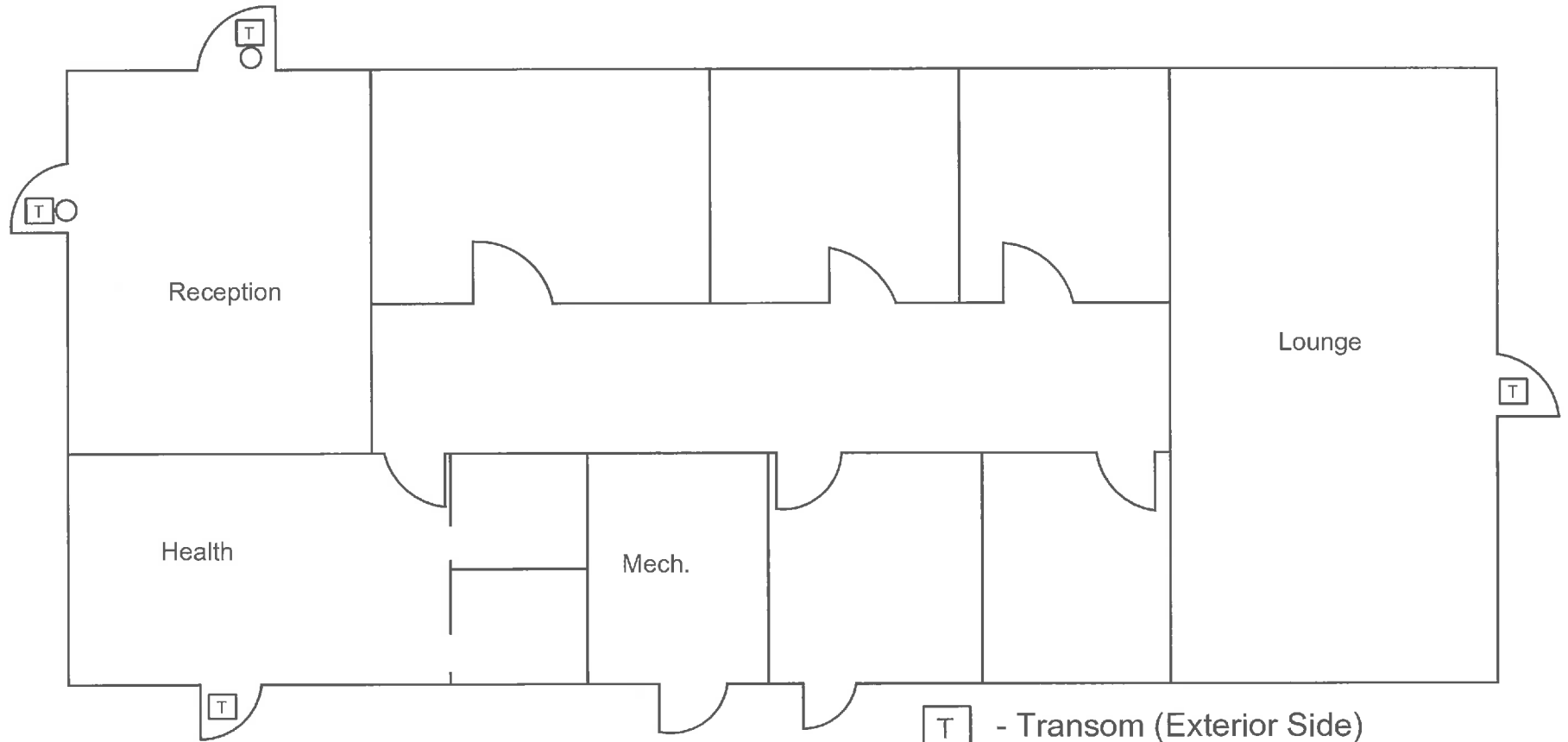
Reading No	Time	Type	Building	Location	Component	Substrate	Side	Condition	Results	PbC	PbC Error	PbL	PbL Error	PbK	PbK Error
337	4/1/15	Paint	Administration Building	Health office	Door frame	Wood	C	Intact	Negative	0.1	0.06	0.1	0.06	0.11	0.4
338	4/1/15	Paint	Administration Building	Health office	Transom	Wood	C	Intact	Negative	0.26	0.11	0.26	0.11	0.5	0.5
339	4/1/15	Paint	Administration Building	Health office	Baseboard	Wood	C	Intact	Negative	0.3	0.26	0.3	0.26	0.6	0.7
340	4/1/15	Paint	Administration Building	Mechanical room	Door	Metal	C	Intact	Negative	0.21	0.16	0.21	0.16	-0.58	1.56
341	4/1/15	Paint	Administration Building	Mechanical room	Door frame	Metal	C	Intact	Negative	0.24	0.14	0.24	0.14	0.22	1.06
342	4/1/15	Paint	Administration Building	Exterior	Wall	Brick	A	Intact	Negative	0.01	0.02	0.01	0.02	0.4	0.5
343	4/1/15	Paint	Administration Building	Exterior	Wall	Brick	B	Intact	Negative	0	0.02	0	0.02	0.5	0.6
344	4/1/15	Paint	Administration Building	Exterior	Wall	Brick	C	Intact	Negative	0	0.02	0	0.02	0.4	0.8
345	4/1/15	Paint	Administration Building	Exterior	Wall	Brick	D	Intact	Negative	0	0.02	0	0.02	0.6	0.5
346	4/1/15	Paint	Administration Building	Exterior	Door	Metal	A	Intact	Negative	-0.16	0.68	0.28	0.11	-0.16	0.68
347	4/1/15	Paint	Administration Building	Exterior	Door frame	Wood	A	Poor	Negative	0.24	0.19	0.24	0.19	0.6	0.6
348	4/1/15	Paint	Administration Building	Exterior	Transom	Wood	A	Intact	Positive	2	0.9	2	0.9	0.9	0.7
349	4/1/15	Paint	Administration Building	Exterior	Door	Metal	B	Intact	Negative	-0.19	0.55	0.25	0.08	-0.19	0.55
350	4/1/15	Paint	Administration Building	Exterior	Door frame	Wood	D	Intact	Negative	0.25	0.36	0.04	0.08	0.25	0.36

Little Lake City School District
Studebaker Elementary School

Reading No	Time	Type	Building	Location	Component	Substrate	Side	Condition	Results	PbC	PbC Error	PbL	PbL Error	PbK	PbK Error
351	4/1/15	Paint	Administration Building	Exterior	Door	Metal	C	Intact	Negative	-0.1	0.66	0.28	0.1	-0.1	0.66
352	4/1/15	Paint	Administration Building	Exterior	Door frame	Metal	C	Intact	Negative	0.3	0.11	0.3	0.11	0.22	0.74
353	4/1/15	Paint	Administration Building	Exterior	Door	Metal	C	Intact	Negative	-0.05	0.62	0.14	0.06	-0.05	0.62
354	4/1/15	Paint	Administration Building	Exterior	Door frame	Wood	C	Intact	Negative	0	0.02	0	0.02	0.15	0.49
355	4/1/15	Paint	Administration Building	Exterior	Door	Metal	D	Intact	Negative	-0.4	0.53	0.24	0.09	-0.4	0.53
356	4/1/15	Paint	Administration Building	Exterior	Door frame	Wood	D	Intact	Negative	0.13	0.06	0.13	0.06	0.4	0.4

APPENDIX B – SITE DRAWING

Administration Building



- T - Transom (Exterior Side)
- O - Door Frame (Interior Side)



Client: Little Lake City School District

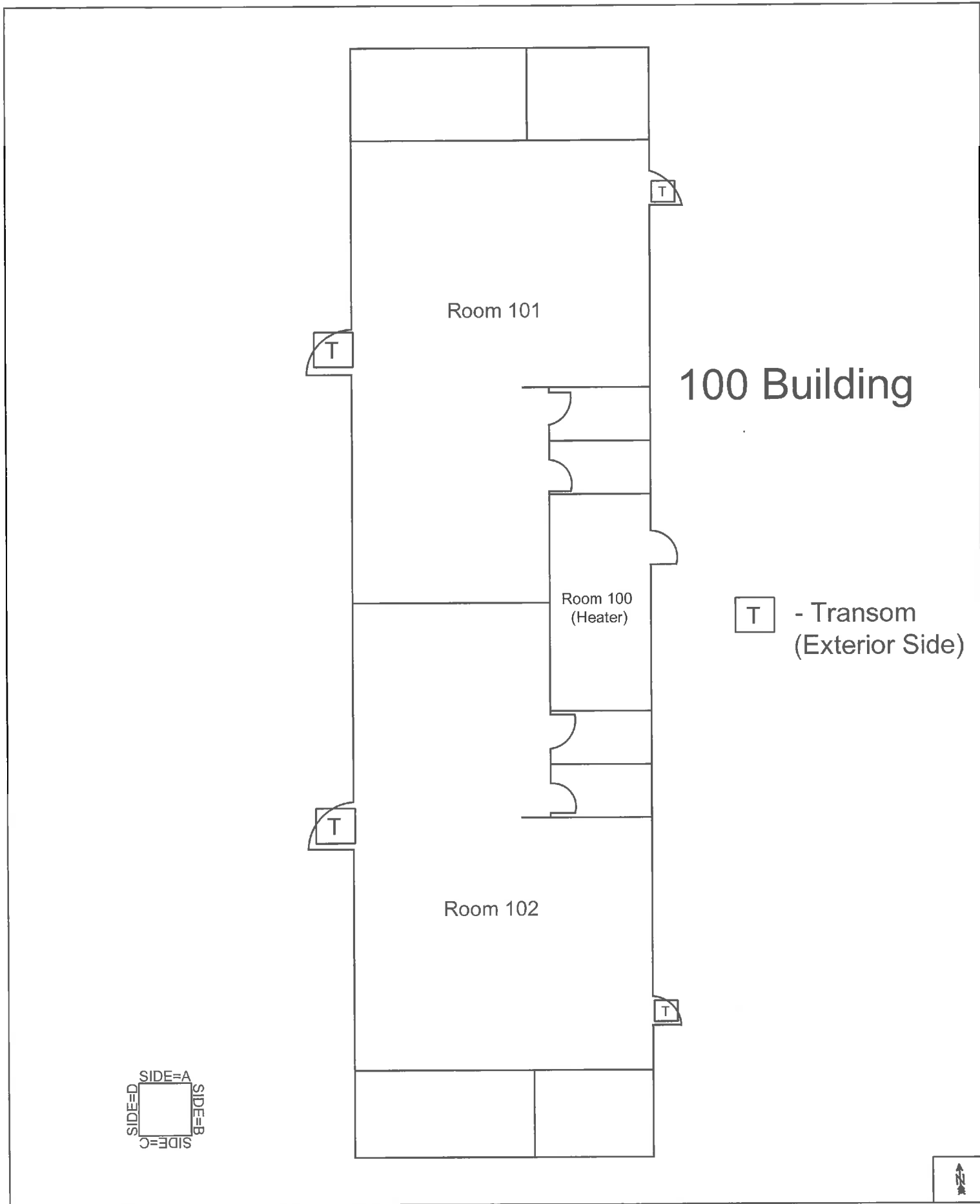
Project #: 15-Z0187-0083

Info: Lead-Based Paint/Glaze Identified



EXECUTIVE ENVIRONMENTAL
HEALTH & SAFETY SIMPLIFIED

Site: Studebaker ES, Door Replacement Project
Address: 11800 Halcourt Avenue
Norwalk, California 90650



Client: Little Lake City School District

Project#: 15-Z0187-0083

Info: Lead-Based Paint/Glaze Identified

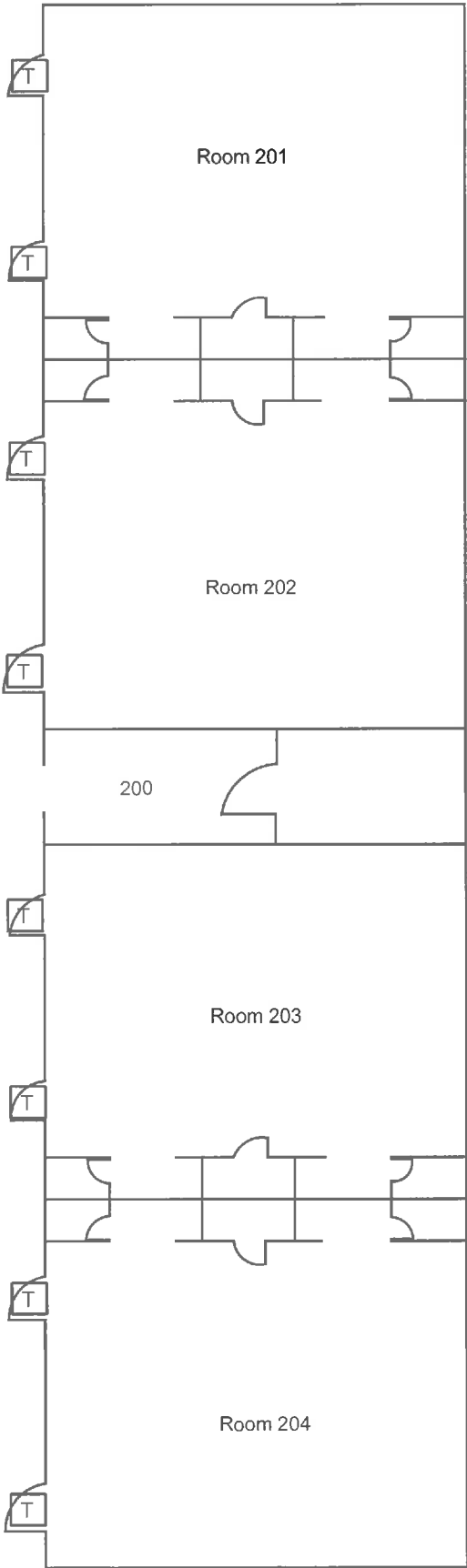


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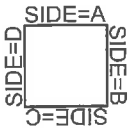
Site: Studebaker ES, Door Replacement Project
Address: 11800 Halcourt Avenue
Norwalk, California 90650

Drawing Not to Scale - © 2012

200 Building



T - Transom
(Exterior Side)



Client: Little Lake City School District

Project#: 15-Z0187-0083

Info: Lead-Based Paint/Glaze Identified



EXECUTIVE ENVIRONMENTAL
HEALTH & SAFETY SIMPLIFIED

Site: Studebaker ES, Door Replacement Project
Address: 11800 Halcourt Avenue
Norwalk, California 90650

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300 Building

T - Transom
(Exterior Side)

SIDE=D
SIDE=A
SIDE=B
SIDE=C

Client: Little Lake City School District

Project#: 15-Z0187-0083

Info: Lead-Based Paint/Glaze Identified



EXECUTIVE ENVIRONMENTAL
HEALTH & SAFETY SIMPLIFIED

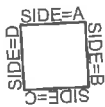
Site: Studebaker ES, Door Replacement Project
Address: 11800 Halcourt Avenue
Norwalk, California 90650

Drawing Not to Scale - © 2012

400 Building



 - Transom
(Exterior Side)



Client: Little Lake City School District

Project#: 15-Z0187-0083

Info: Lead-Based Paint/Glaze Identified

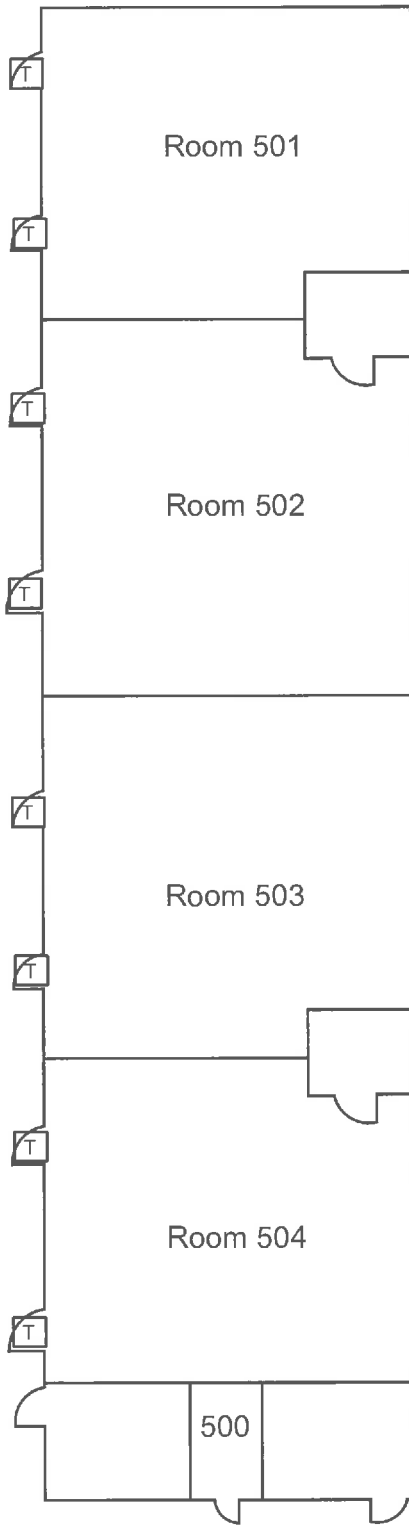


EXECUTIVE ENVIRONMENTAL
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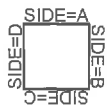
Site: Studebaker ES, Door Replacement Project
Address: 11800 Halcourt Avenue
Norwalk, California 90650

Drawing Not to Scale - © 2012

500 Building



 - Transom
(Exterior Side)



Client: Little Lake City School District

Project#: 15-Z0187-0083

Info: Lead-Based Paint/Glaze Identified

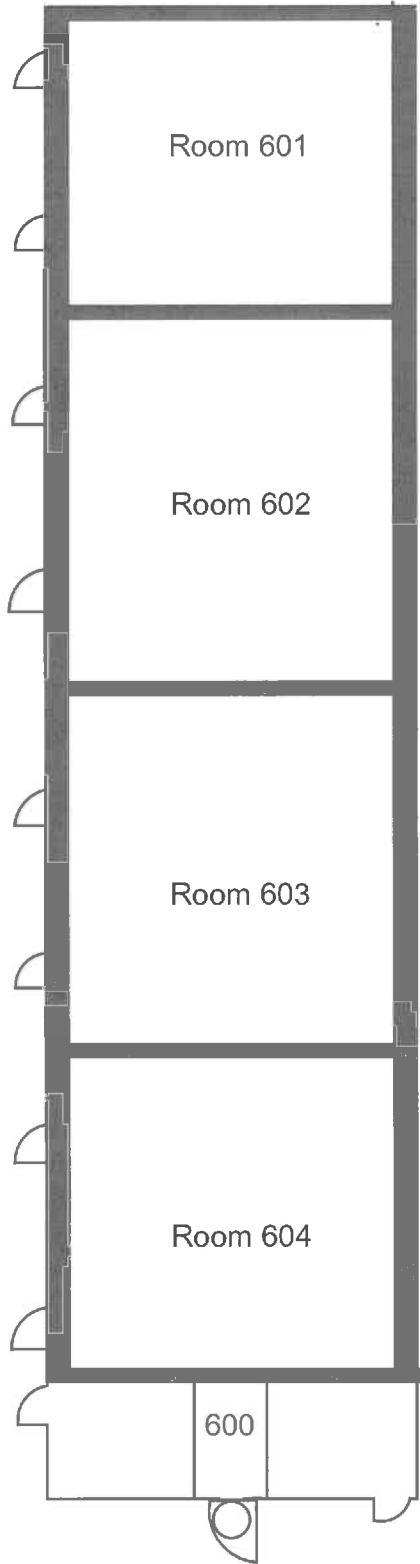


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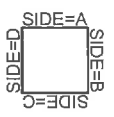
Site: Studebaker ES, Door Replacement Project
Address: 11800 Halcourt Avenue
Norwalk, California 90650

Drawing Not to Scale - © 2012

600 Building



- - Door Frame (Interior Side)
- - Wood Baseboard



Client: Little Lake City School District **Project#:** 15-Z0187-0083 **Info:** Lead-Based Paint/Glaze Identified



EXECUTIVE ENVIRONMENTAL
HEALTH & SAFETY SIMPLIFIED

Site: Studebaker ES, Door Replacement Project
Address: 11800 Halcourt Avenue
Norwalk, California 90650

Drawing Not to Scale - © 2012

APPENDIX C – LEAD HAZARD EVALUATION REPORT

LEAD HAZARD EVALUATION REPORT

Section 1 – Date of Lead Hazard Evaluation 3/31/15 to 4/01/15

Section 2 – Type of Lead Hazard Evaluation (Check one box only)

Lead Inspection Risk assessment Clearance Inspection Other (specify) _____

Section 3 – Structure Where Lead Hazard Evaluation Was Conducted

Address [number, street, apartment (if applicable)] <u>11800 HALCOURT AVE.</u>		City <u>NORWALK</u>	County <u>LOS ANGELES</u>	Zip Code <u>90650</u>
Construction date (year) of structure <u>UNKNOWN</u>	Type of structure <input type="checkbox"/> Multi-unit building <input checked="" type="checkbox"/> School or daycare <input type="checkbox"/> Single family dwelling <input type="checkbox"/> Other _____		Children living in structure? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Don't Know	


Section 4 – Owner of Structure (if business/agency, list contact person)

Name <u>LITTLE LAKE CSD (FRAN DIAZ)</u>		Telephone number <u>(562) 868-8241</u>		
Address [number, street, apartment (if applicable)] <u>10515 S. PIONEER BLVD.</u>		City <u>SANTA FE SPRING</u>	State <u>CA</u>	Zip Code <u>90670</u>

Section 5 – Results of Lead Hazard Evaluation (check all that apply)

No lead-based paint detected Intact lead-based paint detected Deteriorated lead-based paint detected
 No lead hazards detected Lead-contaminated dust found Lead-contaminated soil found Other _____

Section 6 – Individual Conducting Lead Hazard Evaluation

Name <u>George Valverde</u>		Telephone number <u>(626) 441-7050</u>		
Address [number, street, apartment (if applicable)] <u>310 E. Foothill Boulevard Suite 200</u>		City <u>Arcadia</u>	State <u>CA</u>	Zip Code <u>91006</u>
CDPH certification number <u>24605</u>	Signature 		Date <u>4/01/15</u>	

Name and CDPH certification number of any other individuals conducting sampling or testing (if applicable)

Section 7 – Attachments

- A. A foundation diagram or sketch of the structure indicating the specific locations of each lead hazard or presence of lead-based paint;
- B. Each testing method, device, and sampling procedure used;
- C. All data collected, including quality control data, laboratory results, including laboratory name, address, and phone number.

First copy and attachments retained by inspector
Second copy and attachments retained by owner

Third copy only (no attachments) mailed or faxed to:
California Department of Public Health
Childhood Lead Poisoning Prevention Branch Reports
850 Marina Bay Parkway, Building P, Third Floor
Richmond, CA 94804-6403
Fax: (510) 620-5656

APPENDIX D – XRF PERFORMANCE CHARACTERISTICS SHEET

Performance Characteristic Sheet

EFFECTIVE DATE: September 24, 2004

EDITION NO.: 1

MANUFACTURER AND MODEL:

Make: Niton LLC

Tested Model: XLP 300

Source: ¹⁰⁹Cd

Note: This PCS is also applicable to the equivalent model variations indicated below, for the Lead-in-Paint K+L variable reading time mode, in the XLI and XLP series:

XLI 300A, XLI 301A, XLI 302A, and XLI 303A.

XLP 300A, XLP 301A, XLP 302A, and XLP 303A.

XLI 700A, XLI 701A, XLI 702A, and XLI 703A.

XLP 700A, XLP 701A, XLP 702A, and XLP 703A.

Note: The XLI and XLP versions refer to the shape of the handle part of the instrument. The differences in the model numbers reflect other modes available, in addition to Lead-in-Paint modes. The manufacturer states that specifications for these instruments are identical for the source, detector, and detector electronics relative to the Lead-in-Paint mode.

FIELD OPERATION GUIDANCE

OPERATING PARAMETERS:

Lead-in-Paint K+L variable reading time mode.

XRF CALIBRATION CHECK LIMITS:

0.8 to 1.2 mg/cm ² (inclusive)

The calibration of the XRF instrument should be checked using the paint film nearest 1.0 mg/cm² in the NIST Standard Reference Material (SRM) used (e.g., for NIST SRM 2579, use the 1.02 mg/cm² film).

If readings are outside the acceptable calibration check range, follow the manufacturer's instructions to bring the instruments into control before XRF testing proceeds.

SUBSTRATE CORRECTION:

For XRF results using Lead-in-Paint K+L variable reading time mode, substrate correction is not needed for:

Brick, Concrete, Drywall, Metal, Plaster, and Wood

INCONCLUSIVE RANGE OR THRESHOLD:

K+L MODE READING DESCRIPTION	SUBSTRATE	THRESHOLD (mg/cm ²)
Results not corrected for substrate bias on any substrate	Brick	1.0
	Concrete	1.0
	Drywall	1.0
	Metal	1.0
	Plaster	1.0
	Wood	1.0

BACKGROUND INFORMATION

EVALUATION DATA SOURCE AND DATE:

This sheet is supplemental information to be used in conjunction with Chapter 7 of the HUD *Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing* ("HUD Guidelines"). Performance parameters shown on this sheet are calculated from the EPA/HUD evaluation using archived building components. Testing was conducted in August 2004 on 133 testing combinations. The instruments that were used to perform the testing had new sources; one instrument's was installed in November 2003 with 40 mCi initial strength, and the other's was installed June 2004 with 40 mCi initial strength.

OPERATING PARAMETERS:

Performance parameters shown in this sheet are applicable only when properly operating the instrument using the manufacturer's instructions and procedures described in Chapter 7 of the HUD Guidelines.

SUBSTRATE CORRECTION VALUE COMPUTATION:

Substrate correction is not needed for brick, concrete, drywall, metal, plaster or wood when using Lead-in-Paint K+L variable reading time mode, the normal operating mode for these instruments. If substrate correction is desired, refer to Chapter 7 of the HUD Guidelines for guidance on correcting XRF results for substrate bias.

EVALUATING THE QUALITY OF XRF TESTING:

Randomly select ten testing combinations for retesting from each house or from two randomly selected units in multifamily housing. Use the K+L variable time mode readings.

Conduct XRF retesting at the ten testing combinations selected for retesting.

Determine if the XRF testing in the units or house passed or failed the test by applying the steps below.

Compute the Retest Tolerance Limit by the following steps:

Determine XRF results for the original and retest XRF readings. Do not correct the original or retest results for substrate bias. In single-family housing a result is defined as the average of three readings. In multifamily housing, a result is a single reading. Therefore, there will be ten original and ten retest XRF results for each house or for the two selected units.

Calculate the average of the original XRF result and retest XRF result for each testing combination.

Square the average for each testing combination.

Add the ten squared averages together. Call this quantity C.

Multiply the number C by 0.0072. Call this quantity D.

Add the number 0.032 to D. Call this quantity E.

Take the square root of E. Call this quantity F.

Multiply F by 1.645. The result is the Retest Tolerance Limit.

Compute the average of all ten original XRF results.

Compute the average of all ten re-test XRF results.

Find the absolute difference of the two averages.

If the difference is less than the Retest Tolerance Limit, the inspection has passed the retest. If the difference of the overall averages equals or exceeds the Retest Tolerance Limit, this procedure should be repeated with ten new testing combinations. If the difference of the overall averages is equal to greater than the Retest Tolerance Limit a second time, then the inspection should be consider deficient.

Use of this procedure is estimated to produce a spurious result approximately 1% of the time. That is, results of this procedure will call for further examination when no examination is warranted in approximately 1 out of 100 dwelling units tested.

TESTING TIMES:

For the Lead-in-Paint K+L variable reading time mode, the instrument continues to read until it is moved away from the testing surface, terminated by the user, or the instrument software indicates the reading is complete. The following table provides testing time information for this testing mode. The times have been adjusted for source decay, normalized to the initial source strengths as noted above. Source strength and type of substrate will affect actual testing times. At the time of testing, the instruments had source strengths of 26.6 and 36.6 mCi.

Testing Times Using K+L Reading Mode (Seconds)						
Substrate	All Data			Median for laboratory-measured lead levels (mg/cm ²)		
	25 th Percentile	Median	75 th Percentile	Pb < 0.25	0.25 ≤ Pb < 1.0	1.0 ≤ Pb
Wood Drywall	4	11	19	11	15	11
Metal	4	12	18	9	12	14
Brick Concrete Plaster	8	16	22	15	18	16

CLASSIFICATION RESULTS:

XRF results are classified as positive if they are greater than or equal to the threshold, and negative if they are less than the threshold.

DOCUMENTATION:

A document titled *Methodology for XRF Performance Characteristic Sheets* provides an explanation of the statistical methodology used to construct the data in the sheets, and provides empirical results from using the recommended inconclusive ranges of thresholds for specific XRF instruments. For a copy of this document call the National Lead Information Center Clearinghouse at 1-800-424-LEAD.

This XRF Performance Characteristic Sheet was developed by the Midwest research Institute (MRI) and QuanTech, Inc., under a contract between MRI and the XRF manufacturer. HUD has determined that the information provided here is acceptable when used as guidance in conjunction with Chapter 7, Lead-Based Paint Inspection, of HUD's *Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing*.



Industrial Hygiene • Air Quality • Lead & Asbestos • Training • Health & Safety

LIMITED ASBESTOS INSPECTION REPORT

Conducted at:

STUDEBAKER ELEMENTARY SCHOOL
DOOR REPLACEMENT PROJECT
11800 HALCOURT AVENUE
NORWALK, CALIFORNIA 90650

Prepared for:

MR. FRANK DIAZ
DIRECTOR OF MAINTENANCE, OPERATIONS AND FACILITIES
LITTLE LAKE CITY SCHOOL DISTRICT
10515 SOUTH PIONEER BOULEVARD
SANTA FE SPRINGS, CALIFORNIA 90670

Prepared by:

EXECUTIVE ENVIRONMENTAL
310 EAST FOOTHILL BOULEVARD, SUITE 200
ARCADIA, CALIFORNIA 91006

Project Number EE 15-Z0187-0083
May 6, 2015

Report assembled by:

Yesenia G. Galeana
Technical Report Writer
Executive Environmental

Report generated/reviewed by:

Tim Galeana, CAC # 98-2470
Senior Project Manager
Executive Environmental

TABLE OF CONTENTS

- I. EXECUTIVE SUMMARY
- II. SAMPLING METHODOLOGY
- III. SAMPLE ANALYSIS
- IV. FINDINGS
- V. CONCLUSIONS/RECOMMENDATIONS
- VI. DISCLAIMER/REPORT LIMITATIONS

APPENDICES

APPENDIX A – LABORATORY ANALYSIS REPORT

APPENDIX B – SITE DRAWING

LIMITED ASBESTOS INSPECTION REPORT

Project Number: EE 15-Z0187-0083

Client: Little Lake City School District
10515 South Pioneer Boulevard
Santa Fe Springs, California 90670

Site Location: Studebaker Elementary School
Door Replacement Project
11800 Halcourt Avenue
Norwalk, California 90650

Site Use: School Property

Contact Person: Mr. Frank Diaz
Director of Maintenance, Operations and Facilities
Phone: (562) 868-8241, ext. 2197

Inspection Date: March 31, 2015

Inspected By: Mr. Wilson Medina
Certified Site Surveillance Technician, # 98-2346

Report Assembled By: Ms. Yesenia G. Galeana
Technical Report Writer

Report Generated/Reviewed By: Mr. Tim Galeana
Certified Asbestos Consultant, # 98-2470

I. EXECUTIVE SUMMARY

Executive Environmental (EE) provided the services of a Certified Site Surveillance Technician to conduct a limited asbestos inspection of the following buildings: Administration Building, 100 Building, 200 Building, 300 Building, 400 Building, 500 Building and 600 Building at Studebaker Elementary School, located at 11800 Halcourt Avenue, Norwalk, California. The inspection was conducted as a precursor to the upcoming Door Replacement Project. Materials suspected of containing asbestos were sampled and analyzed for the presence of asbestos. Asbestos-Containing Materials (ACM) were identified during this inspection. *This is considered to be a limited inspection. Inspection was limited to materials anticipated to be impacted by the Door Replacement Project, as directed by the client.*

II. SAMPLING METHODOLOGY

A visual inspection of the interior and exterior of the following buildings: Administration Building, 100 Building, 200 Building, 300 Building, 400 Building, 500 Building and 600 Building was conducted prior to the collection of any bulk samples. The visual

inspection was conducted to identify and record the location and condition of the materials to be sampled. Following the visual inspection, bulk material samples of the identified suspect asbestos-containing building materials were collected. The materials were categorized into homogeneous groupings, and each sample was assigned a unique sample number and placed into a sealed container.

Upon completion of the bulk sample collection, a chain of custody was prepared, and the samples were delivered to the laboratory for analysis. Hygeia Laboratories, Incorporated, analyzed the samples using Polarized Light Microscopy (PLM). Hygeia Laboratories is an accredited participant in the National Voluntary Laboratory Accreditation Program (NVLAP), No. 102116-0, and is also accredited by the American Industrial Hygiene Association (AIHA), No. 101658. The principles described in the current Environmental Protection Agency (EPA) 600 method were used in the preparation and analysis of the bulk samples.

Note: Inaccessible, suspect asbestos materials may be located within sealed ceilings, walls, or floors; or within wall cavities, interstitials, shafts, etc. Suspect asbestos materials located in these areas must be sampled prior to any activities that might cause them to be disturbed.

III. SAMPLE ANALYSIS

Sixty (60) suspect asbestos-containing material samples were collected during this inspection. The laboratory analysis results are listed in the following table. Materials determined not to contain asbestos are listed as "No Asbestos Detected" (NAD).

Any material found to contain more than 1% of a known asbestos substance is considered to be an asbestos-containing material (ACM). Materials falling within this category are controlled and must be handled in accordance with the California Occupational Safety & Health Administration (Cal/OSHA), EPA, and South Coast Air Quality Management District (SCAQMD) regulations.

In addition, materials which are characterized as non-ACM by EPA or other local regulatory agencies may fall within the regulatory standards of Cal/OSHA, which further regulates any materials found to contain more than 1/10 of 1%, but 1% or less, of a known asbestos substance as asbestos-containing construction materials (ACCMs). Impacting or handling ACCMs requires special employer registration, documentation, training, and personal protective equipment. When a material is to be impacted, the National Emission Standards for Hazardous Air Pollutants (NESHAPs) regulations require further testing for materials that fall within this category.

The PLM analytical protocol requires each layer of the sample to be analyzed separately. The quantity of analyses will vary based on the number of layers in a sample and whether a "positive stop" is employed. When one sample of a homogeneous area is positive, the remainder of the samples need not be analyzed, because the entire homogeneous area must be considered positive.

Sampling results begin on the next page.

POLARIZED LIGHT MICROSCOPY (PLM) ANALYSIS DATA

Studebaker Elementary School
11800 Halcourt Avenue
Norwalk, California 90650

Homogeneous Material #	Material Description	Material Location	Estimated Quantity	Sample Number	Sample Location	Analytical Results
100 Building^A						
1	Floor tile and mastic	Rooms 101 and 102 (under carpet)	800 Square Feet	1503310083WM-01	Room 101, west	Layer A: NAD ^B
						Layer B: 5% chrysotile
						Layer C: 2% chrysotile
				1503310083WM-02	Room 101, east	Layer A: NAD
						Layer B: 5% chrysotile
				Layer C: 2% chrysotile		
1503310083WM-03	Room 102, west	Layer A: NAD				
		Layer B: 5% chrysotile				
		Layer C: 2% chrysotile				
2	Carpet glue	Rooms 101 and 102 (2 nd layer of carpet over floor tile)	800 Square Feet	1503310083WM-04	Room 101, west	NAD
				1503310083WM-05	Room 101, east	NAD
				1503310083WM-06	Room 102, west	NAD
3	Vinyl basecove with glue	Rooms 101 and 102	70 Linear Feet	1503310083WM-07	Room 101, northeast	NAD
				1503310083WM-08	Room 102, west	NAD
				1503310083WM-09	Room 102, southeast	NAD
4	Fire-rated door	Heater room	1 Total	---	---	Assumed

Note: This table must be used in conjunction with the entire report. This document is not to be used for contract bidding and is intended to be used to identify asbestos-containing materials and their locations only.

^A NOTE: 1) Wood door transoms throughout. 2) Interior and exterior perimeter brick walls. 3) Self-stick carpet (1st layer) in classrooms 101 and 102. 4) No fire-rated doors throughout classrooms.

^B NAD = "No Asbestos Detected"

POLARIZED LIGHT MICROSCOPY (PLM) ANALYSIS DATA

Studebaker Elementary School
11800 Halcourt Avenue
Norwalk, California 90650

Homogeneous Material #	Material Description	Material Location	Estimated Quantity	Sample Number	Sample Location	Analytical Results
200 Building^c						
5	Carpet glue	Rooms 201, 202, 203 and 204 (2 nd layer of carpet over floor tile)	3,700 Square Feet	1503310083WM-10	Room 201, southwest	NAD ^d
				1503310083WM-11	Room 202, northwest	NAD
				1503310083WM-12	Room 203, northwest	NAD
6	Floor tile and mastic	Rooms 201, 202, 203 and 204 (under carpet)	3,700 Square Feet	1503310083WM-13	Room 201, southwest	Layer A: NAD
						Layer B: 5% chrysotile
						Layer C: 2% chrysotile
				1503310083WM-14	Room 202, northwest	Layer A: NAD
						Layer B: 5% chrysotile
						Layer C: 2% chrysotile
1503310083WM-15	Room 203, northwest	Layer A: NAD				
		Layer B: 5% chrysotile				
		Layer C: 2% chrysotile				
7	Vinyl basecove with glue	Rooms 201, 202, 203 and 204	150 Linear Feet	1503310083WM-16	Room 201, northwest	NAD
				1503310083WM-17	Room 202, southwest	NAD
				1503310083WM-18	Room 204, southwest	NAD

Note: This table must be used in conjunction with the entire report. This document is not to be used for contract bidding and is intended to be used to identify asbestos-containing materials and their locations only.

^c NOTE: 1) Wood door transoms throughout. 2) Interior and exterior perimeter brick walls. 3) Self-stick carpet (1st layer) throughout classrooms. 4) No fire-rated doors throughout classrooms.

^d NAD = "No Asbestos Detected"

POLARIZED LIGHT MICROSCOPY (PLM) ANALYSIS DATA

Studebaker Elementary School
11800 Halcourt Avenue
Norwalk, California 90650

Homogeneous Material #	Material Description	Material Location	Estimated Quantity	Sample Number	Sample Location	Analytical Results
300 Building^E						
8	Carpet glue	Rooms 301, 302, 303 and 304 (2 nd layer of carpet over floor tile or mastic)	3,600 Square Feet	1503310083WM-19	Room 303, northwest	NAD ^F
				1503310083WM-20	Room 303, southwest	NAD
				1503310083WM-21	Room 304, southwest	NAD
9	Floor tile and mastic	Rooms 301, 302, 303 and 304 (under carpet) (mastic only in rooms 301 and 302)	3,600 Square Feet	1503310083WM-22	Room 303, northwest	Layer A: NAD
						Layer B: 5% chrysotile
						Layer C: 2% chrysotile
				1503310083WM-23	Room 303, southwest	Layer A: NAD
						Layer B: 5% chrysotile
						Layer C: 2% chrysotile
1503310083WM-24	Room 304, southwest	Layer A: NAD				
		Layer B: 5% chrysotile				
		Layer C: 2% chrysotile				
10	Vinyl basecove with glue	Rooms 301, 302, 303, 304	150 Linear Feet	1503310083WM-25	Room 301, northwest	NAD
				1503310083WM-26	Room 302, southwest	NAD
				1503310083WM-27	Room 304, northwest	NAD

Note: This table must be used in conjunction with the entire report. This document is not to be used for contract bidding and is intended to be used to identify asbestos-containing materials and their locations only.

^E NOTE: 1) Wood door transoms throughout. 2) Interior and exterior perimeter brick walls. 3) Self-stick carpet (1st layer) throughout classroom. 4) No fire-rated doors throughout rooms 300-304.

^F NAD = "No Asbestos Detected"

POLARIZED LIGHT MICROSCOPY (PLM) ANALYSIS DATA

Studebaker Elementary School
11800 Halcourt Avenue
Norwalk, California 90650

Homogeneous Material #	Material Description	Material Location	Estimated Quantity	Sample Number	Sample Location	Analytical Results
400 Building^G						
11	Carpet glue	Rooms 403 and 404 (2 nd layer of carpet over floor tile)	1,800 Square Feet	1503310083WM-28	Room 403, northwest	NAD ^H
				1503310083WM-29	Room 403, southwest	NAD
				1503310083WM-30	Room 404, northwest	NAD
12	Floor tile and mastic	Rooms 400, 403 and 404 (under carpet in rooms 403 and 404)	2,000 Square Feet	1503310083WM-31	Room 403, northwest	Layer A: NAD
						Layer B: 5% chrysotile
						Layer C: 2% chrysotile
				1503310083WM-32	Room 403, southwest	Layer A: NAD
						Layer B: 5% chrysotile
						Layer C: 2% chrysotile
1503310083WM-33	Room 404, northwest	Layer A: NAD				
		Layer B: 5% chrysotile				
		Layer C: 2% chrysotile				
13	Vinyl basecove with glue	Rooms 400, 401, 402, 403, 404	150 Linear Feet	1503310083WM-34	Room 401, southwest	NAD
				1503310083WM-35	Room 402, northwest	NAD
				1503310083WM-36	Room 404, southwest	NAD

Note: This table must be used in conjunction with the entire report. This document is not to be used for contract bidding and is intended to be used to identify asbestos-containing materials and their locations only.

^G NOTE: 1) Wood door transoms throughout. 2) Interior and exterior perimeter brick walls. 3) Self-stick carpet (1st layer) throughout classrooms, over concrete in rooms 401 and 402. 4) No fire-rated doors throughout rooms 400-404.

^H NAD = "No Asbestos Detected"

POLARIZED LIGHT MICROSCOPY (PLM) ANALYSIS DATA

Studebaker Elementary School
11800 Halcourt Avenue
Norwalk, California 90650

Homogeneous Material #	Material Description	Material Location	Estimated Quantity	Sample Number	Sample Location	Analytical Results
500 Building¹						
14	Carpet glue	Rooms 501, 502, 503, 504 (2 nd layer of carpet over floor tile)	3,600 Square Feet	1503310083WM-37	Room 501, southwest	NAD ^J
				1503310083WM-38	Room 502, northwest	NAD
				1503310083WM-39	Room 503, northwest	NAD
15	Floor tile and mastic	Rooms 501, 502, 503, 504 (under carpet)	3,600 Square Feet	1503310083WM-40	Room 501, southwest	Layer A: NAD
						Layer B: 5% chrysotile
						Layer C: 2% chrysotile
				1503310083WM-41	Room 502, northwest	Layer A: NAD
						Layer B: 5% chrysotile
						Layer C: 2% chrysotile
1503310083WM-42	Room 503, northwest	Layer A: NAD				
		Layer B: 5% chrysotile				
		Layer C: 2% chrysotile				
16	Vinyl basecove with glue	Rooms 501, 502, 403, 504	150 Linear Feet	1503310083WM-43	Room 501, northwest	NAD
				1503310083WM-44	Room 502, southwest	NAD
				1503310083WM-45	Room 503, southwest	NAD
17	Fire-rated door	Room 500	1 Total	---	---	Assumed

Note: This table must be used in conjunction with the entire report. This document is not to be used for contract bidding and is intended to be used to identify asbestos-containing materials and their locations only.

¹ NOTE: 1) Wood door transoms throughout. 2) Interior and exterior perimeter brick walls. 3) Self-stick carpet (1st layer) throughout classrooms. 4) No fire-rated doors throughout classrooms.

^J NAD = "No Asbestos Detected"

POLARIZED LIGHT MICROSCOPY (PLM) ANALYSIS DATA

Studebaker Elementary School
11800 Halcourt Avenue
Norwalk, California 90650

Homogeneous Material #	Material Description	Material Location	Estimated Quantity	Sample Number	Sample Location	Analytical Results
600 Building^K						
18	Carpet glue	Rooms 601, 602, 603, 604 (2 nd layer of carpet over floor tile)	3,600 Square Feet	1504010083WM-46	Room 601, southwest	NAD ^L
				1504010083WM-47	Room 602, northwest	NAD
				1504010083WM-48	Room 603, northwest	NAD
19	Floor tile and mastic	Rooms 601, 602, 603, 604 (under carpet)	3,600 Square Feet	1504010083WM-49	Room 601, southwest	Layer A: NAD
						Layer B: 5% chrysotile
						Layer C: 5% chrysotile
				1504010083WM-50	Room 602, northwest	Layer A: NAD
						Layer B: 5% chrysotile
						Layer C: 5% chrysotile
1504010083WM-51	Room 603, northwest	Layer A: NAD				
		Layer B: 5% chrysotile				
		Layer C: 5% chrysotile				
20	Vinyl basecove with glue	Rooms 601, 602, 603, 604	150 Linear Feet	1504010083WM-52	Room 601, northwest	NAD
				1504010083WM-53	Room 602, southwest	NAD
				1504010083WM-54	Room 603, southwest	NAD

Note: This table must be used in conjunction with the entire report. This document is not to be used for contract bidding and is intended to be used to identify asbestos-containing materials and their locations only.

^K NOTE: 1) Wood door transoms throughout. 2) Interior and exterior perimeter brick walls. 3) Self-stick carpet (1st layer) throughout classrooms. 4) No fire-rated doors throughout rooms 600-604.

^L NAD = "No Asbestos Detected"

POLARIZED LIGHT MICROSCOPY (PLM) ANALYSIS DATA

Studebaker Elementary School
11800 Halcourt Avenue
Norwalk, California 90650

Homogeneous Material #	Material Description	Material Location	Estimated Quantity	Sample Number	Sample Location	Analytical Results
Administration Building^M						
21	9"x9" Floor tile and mastic	Lounge, Reception, Health office	1,000 Square Feet	1504010083WM-55	Lounge, east	Layer A: NAD ^N
						Layer B: 5% chrysotile
						Layer C: 5% chrysotile
				1504010083WM-56	Reception, north	Layer A: NAD
						Layer B: 5% chrysotile
						Layer C: 5% chrysotile
				1504010083WM-57	Health office, east	Layer A: NAD
						Layer B: 5% chrysotile
						Layer C: 5% chrysotile
22	Vinyl basecove with glue	Health office	15 Linear Feet	1504010083WM-58	South	NAD
				1504010083WM-59	Southeast	NAD
				1504010083WM-60	Northeast	NAD
23	Fire-rated door	Mechanical room	1 Total	---	---	Assumed

Note: This table must be used in conjunction with the entire report. This document is not to be used for contract bidding and is intended to be used to identify asbestos-containing materials and their locations only.

^M NOTE: 1) Wood door transoms throughout. 2) Interior and exterior perimeter brick walls. 3) Wood tacked carpet with padding, no glue, over 9" floor tile in Lounge and Reception. 4) New 12" blue floor tile over 9" floor tile at Health office.

^N NAD = "No Asbestos Detected"

IV. FINDINGS

EE conducted a limited asbestos inspection of the following buildings: Administration Building, 100 Building, 200 Building, 300 Building, 400 Building, 500 Building and 600 Building at Studebaker Elementary School, located at 11800 Halcourt Avenue, Norwalk, California.

Twenty-three (23) homogeneous material groups were identified during the visual property inspection. Sixty (60) samples of suspect asbestos-containing materials were collected and delivered to Hygeia Laboratories, Incorporated, for analysis. The homogeneous areas and sampling results are listed on the table in Section III.

The analytical data revealed that the following materials contain asbestos:

100 Building:

- Floor tile and mastic: The floor tile and mastic located under two layers of carpet in rooms 101 and 102 tested positive for asbestos content.
- Fire-Rated Door: The fire-rated door located in the heater room is assumed to be asbestos containing.

200 Building:

- Floor tile and mastic: The floor tile and mastic located under two layers of carpet in rooms 201, 202, 203 and 204 tested positive for asbestos content.

300 Building:

- Floor tile and mastic: The floor tile and mastic located under two layers of carpet in rooms 301, 302, 303, 304 (mastic only in rooms 301 and 302) tested positive for asbestos content.

400 Building:

- Floor tile and mastic: The floor tile and mastic located in rooms 400, 403 and 404 (under two layers of carpet in 403 and 404) tested positive for asbestos content.

500 Building:

- Floor tile and mastic: The floor tile and mastic located under two layers of carpet in rooms 501, 502, 503 and 504 tested positive for asbestos content.
- Fire-Rated Door: The fire-rated door located in the room 500 is assumed to be asbestos containing.

600 Building:

- Floor tile and mastic: The floor tile and mastic located under two layers of carpet in rooms 601, 602, 603 and 604 tested positive for asbestos content.

Administration Building:

- **9"x9" Floor tile and mastic:** The 9"x9" floor tile and mastic located under 12" floor tile or carpet in the Lounge, Reception and Health office tested positive for asbestos content.
- **Fire-Rated Door:** The fire-rated door located in the mechanical room is assumed to be asbestos containing.

V. CONCLUSIONS/RECOMMENDATIONS

Normally, asbestos-containing material found to be in good condition is not considered a hazard, unless it is disturbed. Prior to the start of any activity, such as remodeling, demolition, or renovation, that might disturb this material, a Certified Asbestos Consultant should be contracted to design and monitor the project. A California-licensed asbestos contractor should be hired to complete the asbestos abatement procedures.

If you have any questions, please call Mr. Tim Galeana at 626-441-7050. We are glad we could be of service to you.

VI. DISCLAIMER/REPORT LIMITATIONS

All reports and recommendations are based on conditions and practices observed and information made available to Executive Environmental (EE) by the client and the designated sites/facilities on the days sampling was conducted. This report does not purport to set forth all hazards, nor to indicate that other hazards do not exist. No responsibility is assumed by EE for the control or correction of conditions or practices existing at the facilities, or at any other premises surveyed by EE, for and on the behalf of the client. Services provided by EE shall be governed by the standard of practice for professional services measured at the time those services are rendered.

All information contained in this report is proprietary and limited to the scope of services, parameters of the analytical methods used and the conditions present at the time of this inspection. Any references to quantities are considered estimates and are not to be construed as actual.

APPENDIX A – LABORATORY ANALYSIS REPORT



Bulk Sample Analysis Summary

Analytical Method: EPA 600/R-93/116

April 3, 2015

Ms. Yesenia Galeana Executive Environmental Services 310 E. Foothill Blvd., Suite 200 Arcadia, CA 91006		<u>Hygeia Reference No.:</u> Samples Analyzed: 126 Sampler: W. Medina Sample Condition: Acceptable											Date Collected: Mar. 31-Apr. 1, 2015 Date Received: April 2, 2015 Date Analyzed: April 3, 2015			
Client Reference: 15-Z0187-0083		Asbestos Type, %					Non-Asbestos Constituents, %					QC				
Client Sample ID Hygeia Sample ID	Sample Description - color <i>Comments</i>	Asbestos Detected	Chrysotile	Amosite	Crocidolite	Tremolite / Actinolite	Anthophyllite	Other	Cellulose	Fiberglass	Synthetic		Mineral Fillers	Vermiculite	Organic Binders	Foam
1503310083WM-01 1448587A	Mastic - yellow	No										40		60		
1503310083WM-01 1448587B	N/A - tan	Yes	5									70		25		X
1503310083WM-01 1448587C	Mastic - black	Yes	2									38		60		
1503310083WM-02 1448588A	Mastic - yellow	No										40		60		
1503310083WM-02 1448588B	N/A - tan	Yes	5									70		25		
1503310083WM-02 1448588C	Mastic - black	Yes	2									38		60		
1503310083WM-03 1448589A	Mastic - yellow	No										40		60		
1503310083WM-03 1448589B	N/A - tan	Yes	5									70		25		
1503310083WM-03 1448589C	Mastic - black	Yes	2									38		60		
1503310083WM-04 1448590	N/A - grey/yellow	No									20	5	15	60		
1503310083WM-05 1448591	N/A - grey/yellow	No									20	5	15	60		
1503310083WM-06 1448592	N/A - grey/yellow	No									20	5	15	60		
1503310083WM-07 1448593A	N/A - blue	No									60		40			
1503310083WM-07 1448593B	Mastic - tan	No									50		50			
1503310083WM-08 1448594A	N/A - blue	No									60		40			X
1503310083WM-08 1448594B	Mastic - tan	No									50		50			



Bulk Sample Analysis Summary

Analytical Method: EPA 600/R-93/116

April 3, 2015

Client Reference: 15-Z0187-0083		Asbestos Type, %							Non-Asbestos Constituents, %					QC		
Client Sample ID Hygeia Sample ID	Sample Description - color Comments	Asbestos Detected	Chrysotile	Amosite	Crocidolite	Tremolite / Actinolite	Anthrophyllite	Other	Cellulose	Fiberglass	Synthetic	Mineral Fillers	Vermiculite		Organic Binders	Foam
1503310083WM-09 1448595A	N/A - blue	No										60		40		
1503310083WM-09 1448595B	Mastic - tan	No										50		50		
1503310083WM-10 1448596	N/A - grey/yellow	No									20	5	15	60		
1503310083WM-11 1448597	N/A - grey/yellow	No									20	5	15	60		
1503310083WM-12 1448598	N/A - grey/yellow	No									20	5	15	60		
1503310083WM-13 1448599A	Mastic - yellow	No										40		60		
1503310083WM-13 1448599B	N/A - tan	Yes	5									70		25		
1503310083WM-13 1448599C	Mastic - black	Yes	2									38		60		
1503310083WM-13 1448600A	Mastic - yellow	No										40		60		
1503310083WM-14 1448600B	N/A - tan	Yes	5									70		25		
1503310083WM-14 1448600C	Mastic - black	Yes	2									38		60		
1503310083WM-14 1448601A	Mastic - yellow	No										40		60		
1503310083WM-15 1448601B	N/A - tan	Yes	5									70		25		
1503310083WM-15 1448601C	Mastic - black	Yes	2									38		60		
1503310083WM-16 1448602A	N/A - blue	No										60		40		X
1503310083WM-16 1448602B	Mastic - tan	No										50		50		
1503310083WM-17 1448603A	N/A - blue	No										60		40		
1503310083WM-17 1448603B	Mastic - tan	No										50		50		



Bulk Sample Analysis Summary

Analytical Method: EPA 600/R-93/116

April 3, 2015

Client Reference: 15-Z0187-0083		Asbestos Type, %						Non-Asbestos Constituents, %						QC		
Client Sample ID Hygeia Sample ID	Sample Description - color Comments	Asbestos Detected	Chrysotile	Amosite	Crocidolite	Tremolite / Actinolite	Anthophyllite	Other	Cellulose	Fiberglass	Synthetic	Mineral Fillers	Vermiculite		Organic Binders	Foam
1503310083WM-18 1448604A	N/A - blue	No										60		40		
1503310083WM-18 1448604B	Mastic - tan	No										50		50		
1503310083WM-19 1448605	N/A - grey/yellow	No									20	5		15	60	
1503310083WM-20 1448606	N/A - grey/yellow	No									20	5		15	60	
1503310083WM-21 1448607	N/A - grey/yellow	No									20	5		15	60	X
1503310083WM-22 1448608A	Mastic - yellow	No										40		60		
1503310083WM-22 1448608B	N/A - tan	Yes	5									70		25		
1503310083WM-22 1448608C	Mastic - black	Yes	2									38		60		
1503310083WM-23 1448609A	Mastic - yellow	No										40		60		
1503310083WM-23 1448609B	N/A - tan	Yes	5									70		25		
1503310083WM-23 1448609C	Mastic - black	Yes	2									38		60		
1503310083WM-24 1448610A	Mastic - yellow	No										40		60		
1503310083WM-24 1448610B	N/A - tan	Yes	5									70		25		
1503310083WM-24 1448610C	Mastic - black	Yes	2									38		60		
1503310083WM-25 1448611A	N/A - blue	No										60		40		
1503310083WM-25 1448611B	Mastic - tan	No										50		50		
1503310083WM-26 1448612A	N/A - blue	No										60		40		X
1503310083WM-26 1448612B	Mastic - tan	No										50		50		



Bulk Sample Analysis Summary

Analytical Method: EPA 600/R-93/116

April 3, 2015

Client Reference: 15-Z0187-0083		Asbestos Type, %							Non-Asbestos Constituents, %					QC			
Client Sample ID Hygeia Sample ID	Sample Description - color Comments	Asbestos Detected	Chrysotile	Amosite	Crocidolite	Tremolite / Actinolite	Anthrophyllite	Other	Cellulose	Fiberglass	Synthetic	Mineral Fillers	Vermiculite		Organic Binders	Foam	
1503310083WM-27 1448613A	N/A - blue	No										60		40			
1503310083WM-27 1448613B	Mastic - tan	No										50		50			
1503310083WM-28 1448614	N/A - grey/yellow	No										80	15		5		
1503310083WM-29 1448615	N/A - grey/yellow	No										80	15		5		X
1503310083WM-30 1448616	N/A - grey/yellow	No										80	15		5		
1503310083WM-31 1448617A	Mastic - yellow	No										40		60			
1503310083WM-31 1448617B	N/A - tan	Yes	5									75		20			X
1503310083WM-31 1448617C	Mastic - black	Yes	2									38		60			
1503310083WM-32 1448618A	Mastic - yellow	No										40		60			
1503310083WM-32 1448618B	N/A - tan	Yes	5									75		20			
1503310083WM-32 1448618C	Mastic - black	Yes	2									38		60			
1503310083WM-33 1448619A	Mastic - yellow	No										40		60			
1503310083WM-33 1448619B	N/A - tan	Yes	5									75		20			
1503310083WM-33 1448619C	Mastic - black	Yes	2									38		60			
1503310083WM-34 1448620A	N/A - blue	No										60		40			X
1503310083WM-34 1448620B	Mastic - tan	No										40		60			
1503310083WM-35 1448621A	N/A - blue	No										60		40			
1503310083WM-35 1448621B	Mastic - tan	No										40		60			



Bulk Sample Analysis Summary

Analytical Method: EPA 600/R-93/116

April 3, 2015

Client Reference: 15-Z0187-0083		Asbestos Type, %							Non-Asbestos Constituents, %					QC		
Client Sample ID Hygeia Sample ID	Sample Description - color Comments	Asbestos Detected	Chrysotile	Amosite	Crocidolite	Tremolite / Actinolite	Anthophyllite	Other	Cellulose	Fiberglass	Synthetic	Mineral Fillers	Vermiculite		Organic Binders	Foam
1503310083WM-36 1448622A	N/A - blue	No										60		40		
1503310083WM-36 1448622B	Mastic - tan	No										40		60		
1503310083WM-37 1448623A	N/A - grey	No										95		5		
1503310083WM-37 1448623B	N/A - grey/yellow	No									60	20		20		
1503310083WM-38 1448624A	N/A - grey	No										95		5		
1503310083WM-38 1448624B	N/A - grey/yellow	No									60	20		20		
1503310083WM-39 1448625	N/A - grey/yellow	No									60	20		20		
1503310083WM-40 1448626A	Mastic - yellow	No										40		60		
1503310083WM-40 1448626B	N/A - tan	Yes	5									75		20		
1503310083WM-40 1448626C	Mastic - black	Yes	2									38		60		
1503310083WM-41 1448627A	Mastic - yellow	No										40		60		
1503310083WM-41 1448627B	N/A - tan	Yes	5									75		20		
1503310083WM-41 1448627C	Mastic - black	Yes	2									38		60		
1503310083WM-42 1448628A	Mastic - yellow	No										40		60		
1503310083WM-42 1448628B	N/A - tan	Yes	5									75		20		
1503310083WM-42 1448628C	Mastic - black	Yes	5									35		60		
1503310083WM-43 1448629A	N/A - blue	No										60		40		
1503310083WM-43 1448629B	Mastic - white	No										40		60		



Bulk Sample Analysis Summary

Analytical Method: EPA 600/R-93/116

April 3, 2015

Client Reference: 15-Z0187-0083		Asbestos Type, %							Non-Asbestos Constituents, %					QC		
Client Sample ID Hygeia Sample ID	Sample Description - color Comments	Asbestos Detected	Chrysotile	Amosite	Crocidolite	Tremolite / Actinolite	Anthophyllite	Other	Cellulose	Fiberglass	Synthetic	Mineral Fillers	Vermiculite		Organic Binders	Foam
1503310083WM-44 1448630A	N/A - blue	No										60		40		X
1503310083WM-44 1448630B	Mastic - white	No										40		60		
1503310083WM-45 1448631A	N/A - blue	No										60		40		
1503310083WM-45 1448631B	Mastic - white	No										40		60		
1504010083WM-46 1448632	N/A - grey/tan	No									60	20		20		
1504010083WM-47 1448633	N/A - grey/tan	No									60	20		20		
1504010083WM-48 1448634	N/A - grey/tan	No									60	20		20		X
1504010083WM-49 1448635A	N/A - yellow	No										40		60		
1504010083WM-49 1448635B	Mastic - tan	Yes	5									75		20		
1504010083WM-49 1448635C	N/A - black	Yes	5									35		60		
1504010083WM-50 1448636A	Mastic - yellow	No										40		60		
1504010083WM-50 1448636B	N/A - tan	Yes	5									75		20		
1504010083WM-50 1448636C	Mastic - black	Yes	5									35		60		
1504010083WM-51 1448637A	Mastic - yellow	No										40		60		
1504010083WM-51 1448637B	N/A - tan	Yes	5									75		20		X
1504010083WM-51 1448637C	Mastic - black	Yes	5									35		60		
1504010083WM-52 1448638A	N/A - blue	No										60		40		
1504010083WM-52 1448638B	Mastic - white	No										40		60		



Bulk Sample Analysis Summary

Analytical Method: EPA 600/R-93/116

April 3, 2015

Client Reference: 15-Z0187-0083		Asbestos Type, %							Non-Asbestos Constituents, %					QC		
Client Sample ID Hygeia Sample ID	Sample Description - color Comments	Asbestos Detected	Chrysotile	Amosite	Crocidolite	Tremolite / Actinolite	Anthophyllite	Other	Cellulose	Fiberglass	Synthetic	Mineral Fillers	Vermiculite		Organic Binders	Foam
1504010083WM-53 1448639A	N/A - blue	No										60		40		
1504010083WM-53 1448639B	Mastic - white	No										40		60		
1504010083WM-54 1448640A	N/A - blue	No										60		40		X
1504010083WM-54 1448640B	Mastic - white	No										40		60		
1504010083WM-55 1448641A	Mastic - yellow	No										40		60		
1504010083WM-55 1448641B	N/A - tan	Yes	5									75		20		
1504010083WM-55 1448641C	Mastic - black	Yes	5									35		60		
1504010083WM-56 1448642A	Mastic - yellow	No										40		60		
1504010083WM-56 1448642B	N/A - tan	Yes	5									75		20		
1504010083WM-56 1448642C	Mastic - black	Yes	5									35		60		
1504010083WM-57 1448643A	N/A - grey	No										80		20		
1504010083WM-57 1448643B	Mastic - tan	No										40		60		
1504010083WM-57 1448643C	N/A - blue	Yes	5									75		20		
1504010083WM-57 1448643D	Mastic - black	Yes	5									35		60		
1504010083WM-58 1448644A	N/A - blue	No										60		40		
1504010083WM-58 1448644B	Mastic - yellow	No										40		60		
1504010083WM-59 1448645A	N/A - blue	No										60		40		
1504010083WM-59 1448645B	Mastic - yellow	No										40		60		





Bulk Sample Analysis Summary

Analytical Method: EPA 600/R-93/116

April 3, 2015

Client Reference: 15-Z0187-0083		Asbestos Type, %							Non-Asbestos Constituents, %					QC	
		Asbestos Detected	Chrysotile	Amosite	Crocidolite	Tremolite / Actinolite	Anthophyllite	Other	Cellulose	Fiberglass	Synthetic	Mineral Fillers	Vermiculite		Organic Binders
Client Sample ID Hygeia Sample ID	Sample Description - color Comments														
1504010083WM-60 1448646A	N/A - blue	No									60		40		
1504010083WM-60 1448646B	Mastic - yellow	No									40		60		


Microscopist - Guillermo Hernandez


Microscopist - Rogelio Casillas

The analyses of the samples in this report were performed using polarized light microscopy using the EPA method 600/R-93/116. The phase abundances provided are visually estimated and expressed as percent area. Total percentage of sample constituents may total greater than 100 due to trace amounts. The limit of detection for this analytical method is less than one percent. In multilayer samples, unless otherwise specified, the asbestos concentration is reported for the layer where asbestos is found. These results lie within the statistical limits of variability calculated for standard reference samples routinely analyzed in the laboratory. On a per sample basis, the accuracy and precision of the results depend on the type of sample and its asbestos content.

Hygeia recommends transmission electron microscopy (TEM) analysis on organically bound bulk materials (eg., vinyl floor tile, mastics, roofing materials, joint compounds) when PLM analysis shows undetectable quantities of asbestos. These materials often contain milled asbestos with fiber diameters and lengths too small to be resolved by the PLM and the analysis may yield a false negative result.

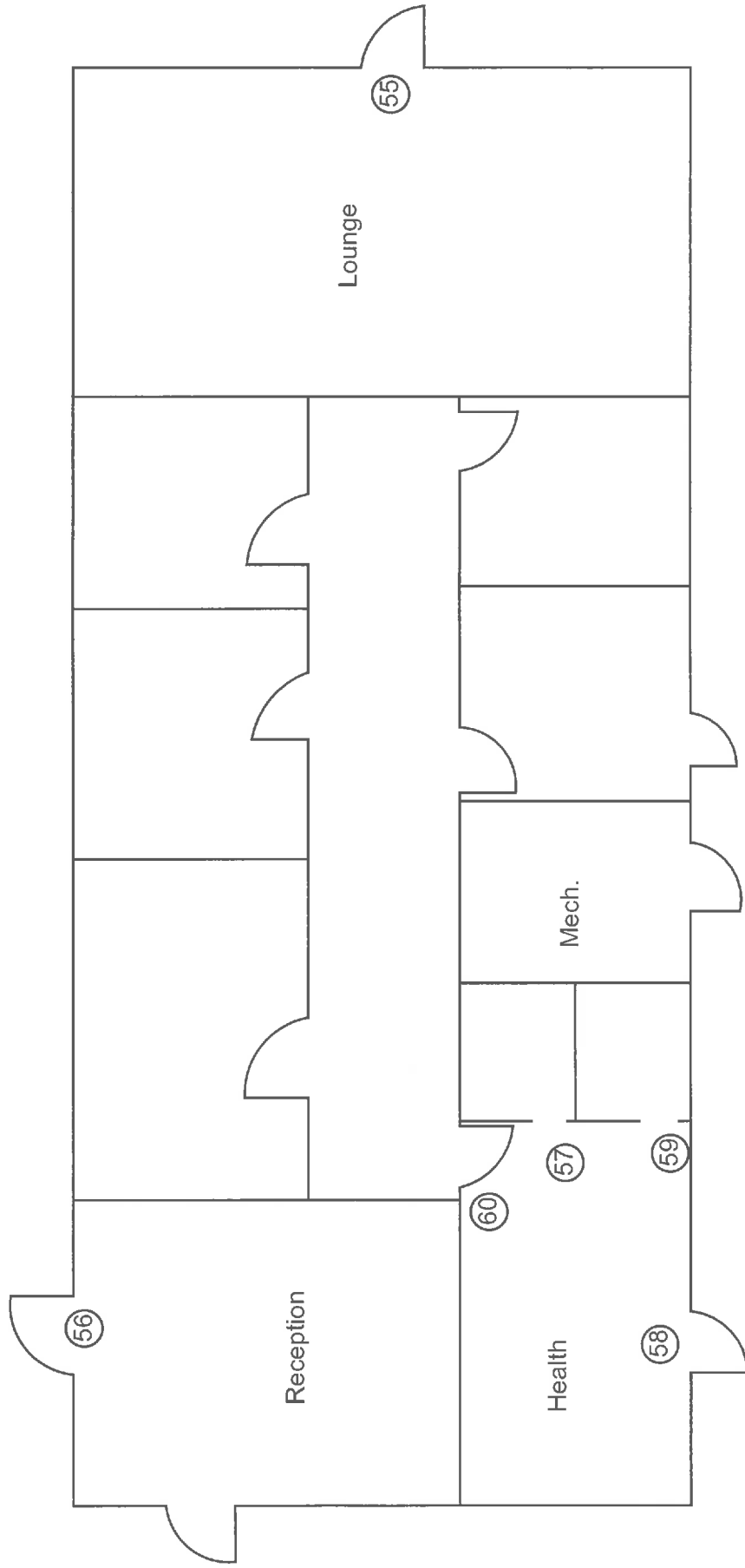
Hygeia Laboratories Inc. is accredited under the NIST/NVLAP program for asbestos in bulk material by polarized light microscopy and the State of California for asbestos analysis.

Hygeia Laboratories Inc. and its personnel shall not be liable for any misinformation provided to us by the client regarding these samples or for any misuse or interpretation of information supplied by us. Liability shall extend to providing replicate analyses only. This report must not be used to claim product endorsement by NVLAP or any agency of the US Government. Hygeia will retain samples for a period of three months unless otherwise specified. This report relates only to samples submitted and analyzed. This report may not be reproduced except for in full, without the written approval of this laboratory. Please feel free to contact Hygeia regarding any questions about these results, this report, or the analytical methods employed.


Arturo Casas - Supervisor of Optical Microscopy

APPENDIX B – SITE DRAWING

Administration Building

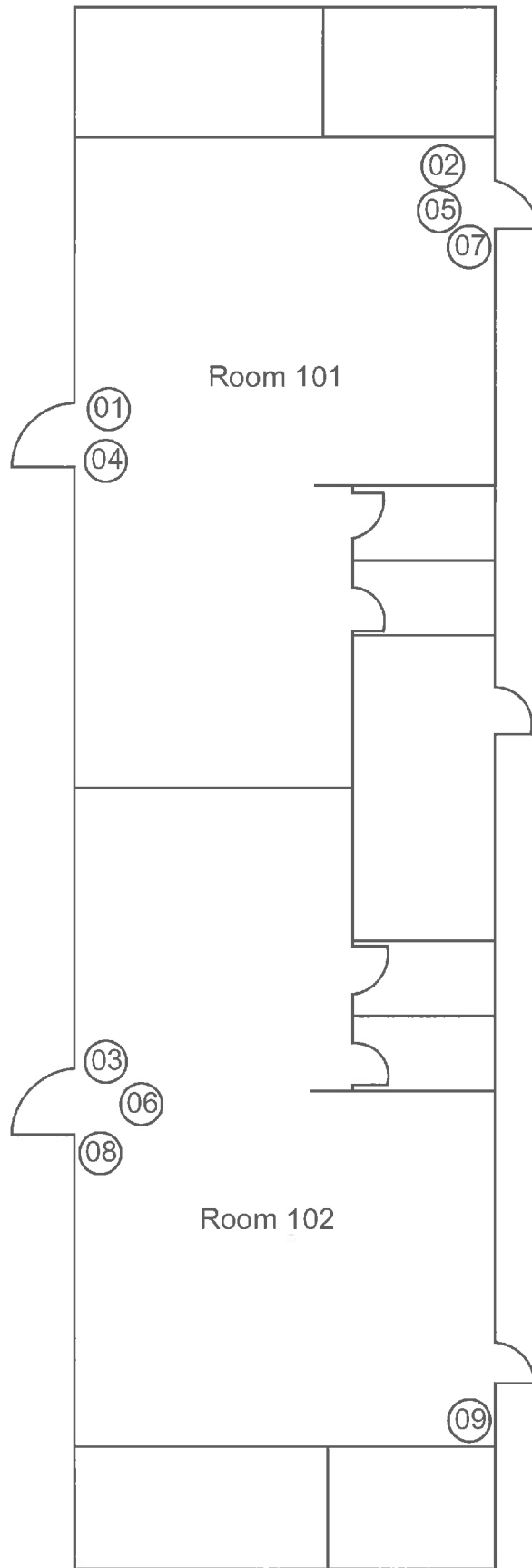


○ - PLM Sample Location



Client: Little Lake City School District	Project #: 15-Z0187-0083	Info: PLM Sample Locations
		Site: Studebaker ES, Door Replacement Project Address: 11800 Halcourt Avenue Norwalk, California 90650

Drawing Not to Scale - © 2012



100 Building

Room 101

Room 102

○ - PLM Sample Location



Client: Little Lake City School District

Project#: 15-Z0187-0083

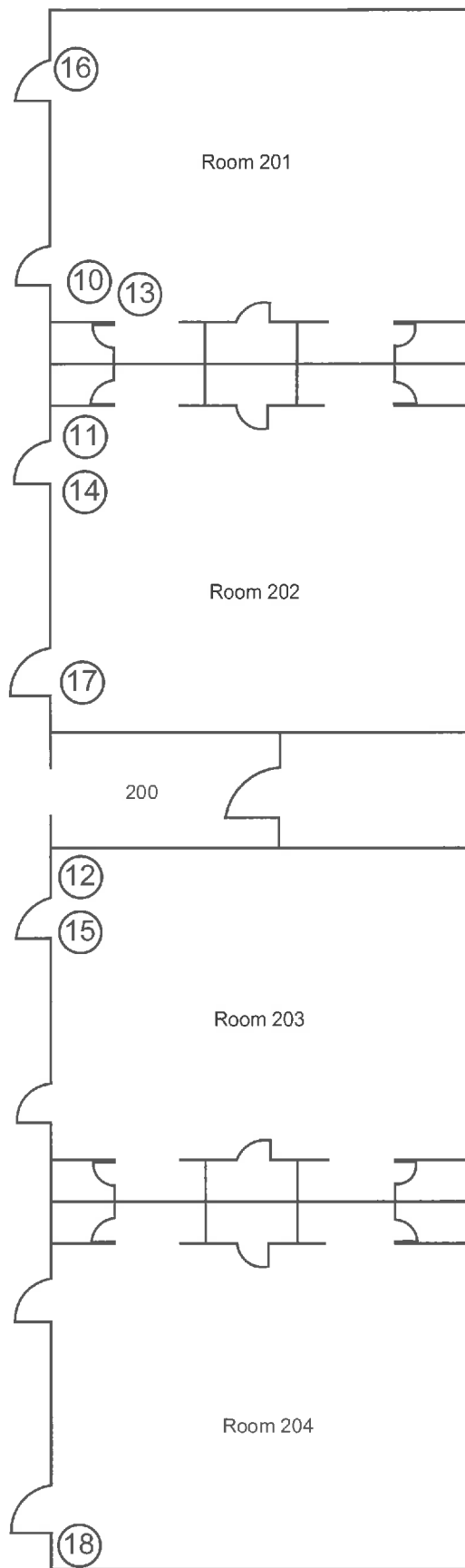
Info: PLM Sample Locations



EXECUTIVE ENVIRONMENTAL
HEALTH & SAFETY SIMPLIFIED

Site: Studebaker ES, Door Replacement Project
Address: 11800 Halcourt Avenue
Norwalk, California 90650

Drawing Not to Scale - © 2012



200 Building

○ - PLM Sample Location



Client: Little Lake City School District

Project#: 15-Z0187-0083

Info: PLM Sample Locations

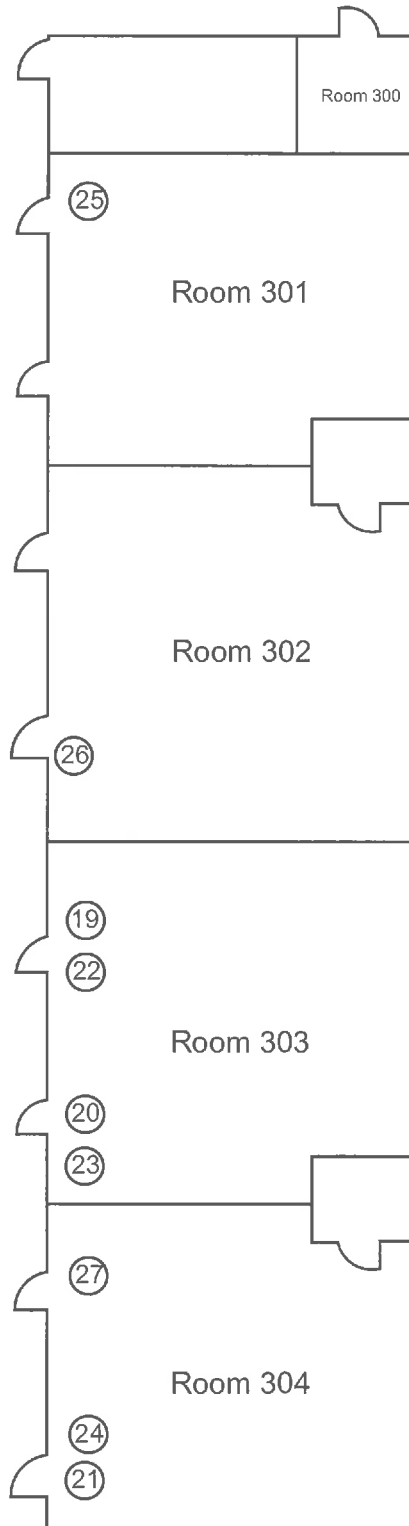


EXECUTIVE ENVIRONMENTAL
HEALTH & SAFETY SIMPLIFIED

Site: Studebaker ES, Door Replacament Project
Address: 11800 Halcourt Avenue
Norwalk, California 90650

Drawing Not to Scale - © 2012

300 Building



○ - PLM Sample Location



Client: Little Lake City School District

Project#: 15-Z0187-0083

Info: PLM Sample Locations

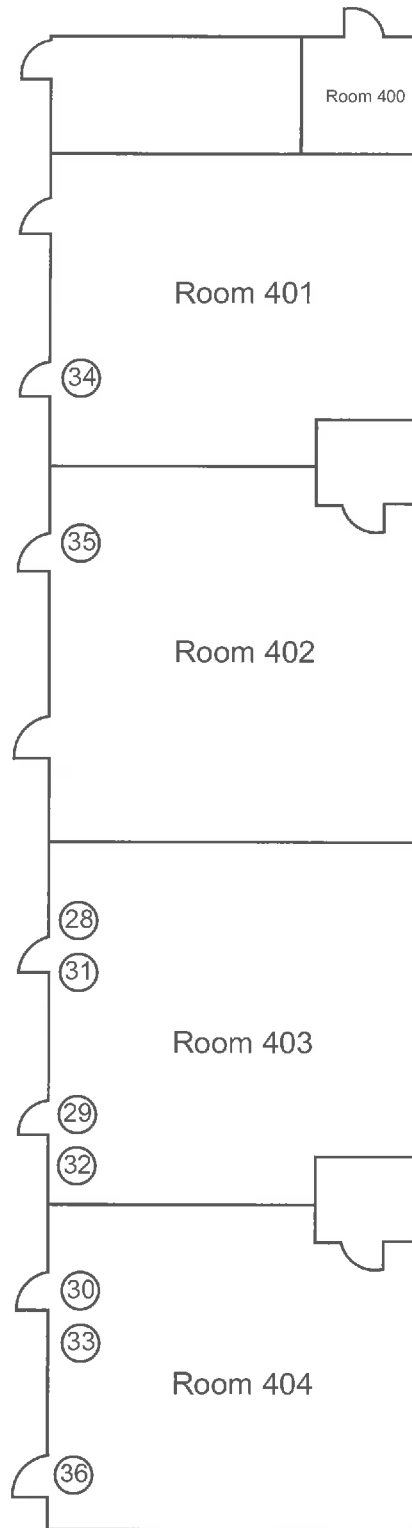


EXECUTIVE ENVIRONMENTAL
HEALTH & SAFETY SIMPLIFIED

Site: Studebaker ES, Door Replacement Project
Address: 11800 Halcourt Avenue
Norwalk, California 90650

Drawing Not to Scale - © 2012

400 Building



○ - PLM Sample Location



Client: Little Lake City School District

Project#: 15-Z0187-0083

Info: PLM Sample Locations

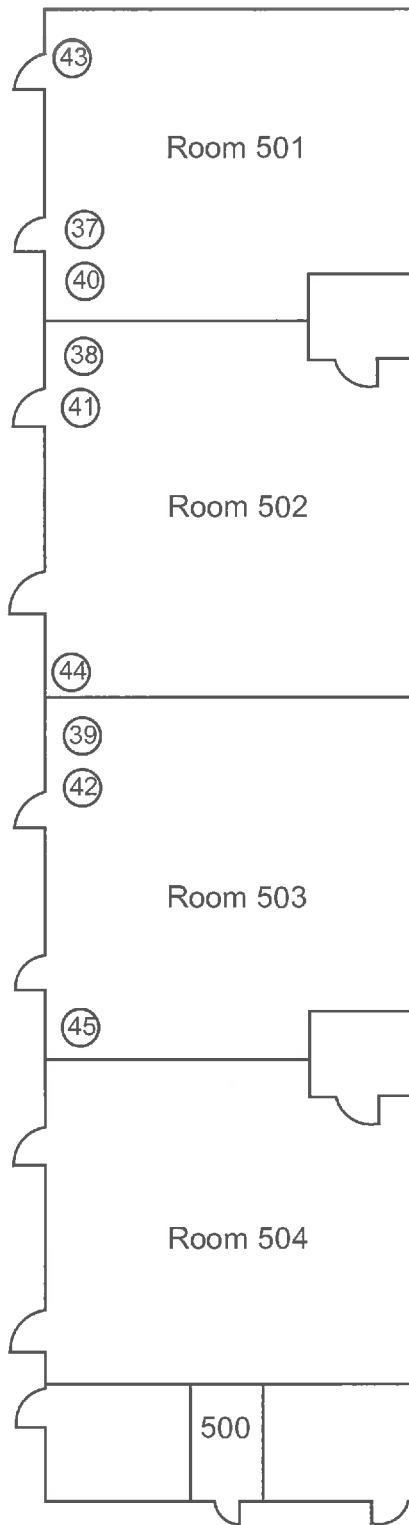


EXECUTIVE ENVIRONMENTAL
HEALTH & SAFETY SIMPLIFIED

Site: Studebaker ES, Door Replacement Project
Address: 11800 Halcourt Avenue
Norwalk, California 90650

Drawing Not to Scale - © 2012

500 Building



○ - PLM Sample Location



Client: Little Lake City School District

Project#: 15-Z0187-0083

Info: PLM Sample Locations

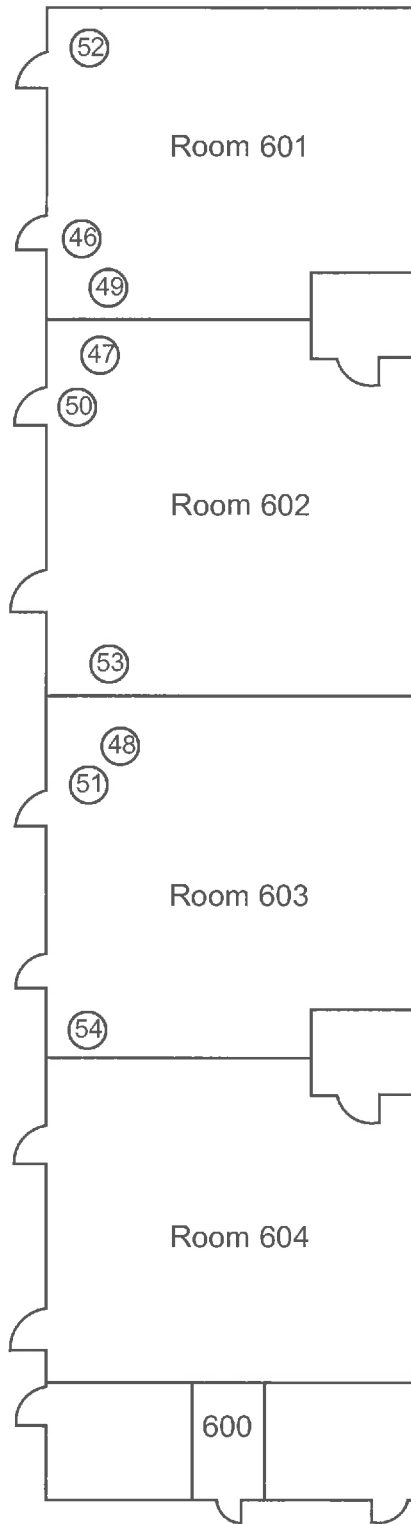


EXECUTIVE ENVIRONMENTAL
HEALTH & SAFETY SIMPLIFIED

Site: Studebaker ES, Door Replacement Project
Address: 11800 Halcourt Avenue
Norwalk, California 90650

Drawing Not to Scale - © 2012

600 Building



○ - PLM Sample Location



Client: Little Lake City School District

Project#: 15-Z0187-0083

Info: PLM Sample Locations



EXECUTIVE ENVIRONMENTAL
HEALTH & SAFETY SIMPLIFIED

Site: Studebaker ES, Door Replacement Project
Address: 11800 Halcourt Avenue
Norwalk, California 90650

Drawing Not to Scale - © 2012



Industrial Hygiene • Air Quality • Lead & Asbestos • Training • Health & Safety

LIMITED LEAD-BASED PAINT INSPECTION REPORT

Conducted at:

STUDEBAKER ELEMENTARY SCHOOL
DOOR REPLACEMENT PROJECT
11800 HALCOURT AVENUE
NORWALK, CALIFORNIA 90650

Prepared for:

MR. FRANK DIAZ
DIRECTOR OF MAINTENANCE, OPERATIONS AND FACILITIES
LITTLE LAKE CITY SCHOOL DISTRICT
10515 SOUTH PIONEER BOULEVARD
SANTA FE SPRINGS, CALIFORNIA 90670

Prepared by:

EXECUTIVE ENVIRONMENTAL
310 EAST FOOTHILL BOULEVARD, SUITE 200
ARCADIA, CALIFORNIA 91006

Project Number EE 15-Z0187-0083
May 6, 2015

Report assembled by:

Yesenia G. Galeana
Technical Report Writer
Executive Environmental

Report generated/reviewed by:

Tim Galeana, CLP
Senior Project Manager
Executive Environmental

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LIMITED LEAD-BASED PAINT INSPECTION

Project Number: EE 15-Z0187-0083

Client: Little Lake City School District
10515 South Pioneer Boulevard
Santa Fe Springs, California 90670

Site Location: Studebaker Elementary School
Door Replacement Project
11800 Halcourt Avenue
Norwalk, California 90650

Site Use: School Property

Contact Person: Mr. Frank Diaz
Director of Maintenance, Operations and Facilities
Phone: (562) 868-8241, ext. 2197

Inspection Date: March 31, 2015

Inspected By: Mr. George Valverde
Certified Lead Professional, CDPH # 24605

Report Assembled By: Ms. Yesenia G. Galeana
Technical Report Writer

Report Generated/Reviewed By: Mr. Tim Galeana
Certified Lead Professional, CDPH # 3732

I. EXECUTIVE SUMMARY

Executive Environmental (EE) provided the services of a Certified Lead Professional (CLP) to conduct a limited lead-based paint inspection of the following buildings: Administration Building, 100 Building, 200 Building, 300 Building, 400 Building, 500 Building and 600 Building at Studebaker Elementary School, located at 11800 Halcourt Avenue, Norwalk, California. EE provided a California Department of Public Health Certified Lead Inspector to conduct the inspection. Lead-based paint was detected during this inspection. EE's Certified Lead Professional conducted these services on March 31, 2015. *This is considered to be a limited inspection. The inspection was limited to locations and surfaces anticipated to be impacted by the Door Replacement Project, as directed by the client.*

II. SAMPLING PROTOCOL

According to the United States Department of Housing and Urban Development's (HUD) guideline document, Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing, and Section 1017 of Title X, Residential Lead-Based Paint Hazard

Reduction Act of 1992, Public Law 102-550, paint found to have a lead concentration of at least 1.0 mg/cm² (milligrams per centimeter squared) by X-Ray Fluorescence (XRF) analysis, or 0.5 percent (5000 parts per million) by weight, is regulated as lead-based paint.

Los Angeles County Childhood Lead Poisoning Prevention Program established in 1991, further regulates that paint found to have a lead concentration greater than 0.7 mg/cm² via XRF readings, or 0.06 weight-to-weight percent by Atomic Absorption Spectrometry (AAS) analysis, is considered to be lead-based paint. The Los Angeles County 0.7 mg/cm² action level was used for determining the lead-based paint in this inspection because it is more stringent than the HUD guidelines.

Any material containing any detectable level of lead is subject to the Occupational Safety and Health Administration's (OSHA) Lead Exposure in Construction Rule 29 Code of Federal Regulation (CFR) 1926.62 and California Code of Regulations Title 8, Section 1532.1 Lead (8CCR1532.1) and Title 8, Section 5198, Lead (8CCR5198). All work that disturbs this type of material must be performed in accordance with this and any other applicable standards.

All facilities built prior to 1979 for residential buildings and prior to 1993 for schools are suspect for lead-containing materials. Federal and state regulations recognize only the following methods of identification: analysis by an XRF instrument, paint bulk sample collection and analysis, or a combination of both. This inspection was conducted via XRF instrumentation. The parameters used to interpret the XRF results are outlined in the HUD guidelines and the XRF Performance Characteristics Sheets (PCS).

III. SAMPLING METHODOLOGY

A visual inspection of the interior and exterior of the following buildings: Administration Building, 100 Building, 200 Building, 300 Building, 400 Building, 500 Building and 600 Building was conducted by EE's CLP to identify major site features and surfaces and/or components suspected of being coated with lead-based paint that will be impacted by the door replacement project. After identifying the materials suspected of being coated with lead-based paint, EE grouped the components, substrates, and room equivalents into testing combinations. A testing combination is defined as the room equivalent, component, and substrate. A room equivalent is an identifiable part of a building (e.g., classrooms, restrooms, mechanical rooms, exterior). Color does not accurately indicate painting history, and is not included when assigning testing combinations. If there was any reason to suspect that materials may have been installed or painted at different times even though they appeared uniform, they were assigned to separate testing combinations.

Following the visual inspection, screening for the presence of lead-based paint and/or glaze was performed on-site using a portable XRF instrument. The XRF has the ability to measure lead content in paint and ceramic glaze within the range of 0 to 50 milligrams per centimeter squared (mg/cm²). The on-site inspection capability of the XRF instrument typically reduces the number of paint-chip samples that may need to be collected and sent for laboratory analysis. The portable XRF instrument used in this inspection was manufactured by Niton Corporation.

The following specifications apply to the Niton XRF:

- Ability to report both the K and L shell line x-ray emission energies simultaneously and report the lead concentration in mg/cm².
- Accuracy for a single reading on all building materials within 0.2 mg/cm², at 95 percent confidence, at 0 to 1 mg/cm².
- Equipped with a 40 milli-curie (mCi) cadmium, 109-sealed, radioactive source. Substrate effects are automatically corrected through a complex algorithm and calibration.

IV. SAMPLE ANALYSIS

According to local, state, and federal standards, the following components that were analyzed with the Niton XRF instrument during this inspection are considered to be coated with a regulated lead-based paint.

SAMPLE ANALYSIS DATA Studebaker Elementary School ^A 11800 Halcourt Avenue Norwalk, California 90650				
Area	Component	Substrate	Estimated Quantity	XRF Result Mg/cm ²
100 Building				
Rooms 101 and 102	Perimeter door transom (exterior side)	Wood	32 Square Feet	1.5
200 Building				
Rooms 201, 202, 203, and 204	Perimeter door transom (exterior side)	Wood	64 Square Feet	1.1
300 Building				
Rooms 301, 302, 303, and 304	Perimeter door transom (exterior side)	Wood	64 Square Feet	1.9
400 Building				
Rooms 401, 402, 403, and 404	Perimeter door transom (exterior side)	Wood	64 Square Feet	1.7
500 Building				
Rooms 501, 502, 503, and 504	Perimeter door transom (exterior side)	Wood	64 Square Feet	1.4

Note: This table must be used in conjunction with the entire report.

^A NOTE: 1) 100 Building: no coat on concrete and brick walls and heater room. 2) 300 Building: no coat on concrete floor of custodian room. 3) 400 Building: No coat in room 400. 4) 500 Building: No coat on concrete floor of room 500.

SAMPLE ANALYSIS DATA				
Studebaker Elementary School ^B 11800 Halcourt Avenue Norwalk, California 90650				
Area	Component	Substrate	Estimated Quantity	XRF Result Mg/cm ²
600 Building				
Interior of classroom 600	Perimeter door frame (interior side)	Wood	1 Total	1.9
Rooms 601, 602, 603 and 604	Baseboard	Wood	480 Linear Feet	1
Administration Building				
Reception area	Perimeter door frame (interior side)	Wood	2 Total	1
Reception, Health Office and Lounge	Perimeter door transom (exterior side)	Wood	32 Square Feet	2

Note: This table must be used in conjunction with the entire report.

V. CONCLUSIONS/RECOMMENDATIONS

EE conducted a limited lead-based paint inspection of the following buildings: Administration Building, 100 Building, 200 Building, 300 Building, 400 Building, 500 Building and 600 Building at Studebaker Elementary School, located at 11800 Halcourt Avenue, Norwalk, California. The following conclusions and/or recommendations apply:

Limited Lead-Based Paint Inspection

- Surfaces anticipated to be impacted by the Door Replacement Project were tested via the Niton XRF for the presence of lead-based paint.
- The items listed in the previous tables were identified as being coated with a regulated lead-based paint.
- The components were observed to be in good to fair condition during this inspection.
- A fully representative number of XRF readings were taken at the project site. The results of these assays are presented in the XRF Summary Results spreadsheets.

It is recommended that all renovation, remodeling, construction, or demolition actions that might potentially disturb surfaces covered with lead-based paint or lead-based ceramic glaze be performed by properly trained and qualified personnel.

^B NOTE; 1) 600 Building: no coat on concrete floor of room 600.2) No coat on interior brick wall, concrete floor, electrical components in mechanical room.

VI. DISCLAIMER/REPORT LIMITATIONS

All reports and recommendations are based on conditions and practices observed and information made available to Executive Environmental (EE) by the client and the designated sites/facilities on the days sampling was conducted. This report does not purport to set forth all hazards, nor to indicate that other hazards do not exist. No responsibility is assumed by EE for the control or correction of conditions or practices existing at the facilities, or at any other premises surveyed by EE, for and on the behalf of the client. Services provided by EE shall be governed by the standard of practice for professional services measured at the time those services are rendered.

All information contained in this report is proprietary and limited to the scope of services, parameters of the analytical methods used and the conditions present at the time of this inspection. Any references to quantities are considered estimates and are not to be construed as actual.

APPENDIX A – XRF SUMMARY RESULTS

Little Lake City School District
Studebaker Elementary School

Reading No	Time	Type	Building	Location	Component	Substrate	Side	Condition	Results	PbC	PbC Error	PbL	PbL Error	PbK	PbK Error
1	3/31/15	Paint			Shutter calibrate					4.77	0	0.69	0	0	0
2	3/31/15	Paint			Calibrate				Positive	1.6	0.4	1.6	0.4	1.6	2.1
3	3/31/15	Paint			Calibrate				Positive	1.4	0.3	1.4	0.3	1.5	1.5
4	3/31/15	Paint			Calibrate				Positive	1.6	0.3	1.6	0.3	1.7	1.6
5	3/31/15	Paint	100 Building	Room 101	Door	Metal	B	Intact	Negative	0.07	0.03	0.07	0.03	-0.2	0.51
6	3/31/15	Paint	100 Building	Room 101	Door frame	Wood	B	Intact	Negative	0.25	0.07	0.25	0.07	0.4	0.4
7	3/31/15	Paint	100 Building	Room 101	Wall	Wood	B	Intact	Negative	0.21	0.1	0.21	0.1	0.3	0.44
8	3/31/15	Paint	100 Building	Room 101	Wall	Brick	B	Intact	Negative	0.03	0.03	0.03	0.03	0.3	0.61
9	3/31/15	Paint	100 Building	Room 101	Baseboard	Wood	B	Intact	Negative	0.01	0.03	0.01	0.03	0.6	0.5
10	3/31/15	Paint	100 Building	Room 101	Door	Metal	D	Intact	Negative	0.05	0.03	0.05	0.03	-0.16	0.59
11	3/31/15	Paint	100 Building	Room 101	Door frame	Wood	D	Intact	Negative	0.19	0.12	0.19	0.12	0.3	0.45
12	3/31/15	Paint	100 Building	Room 101	Wall	Brick	D	Intact	Negative	0.06	0.05	0.06	0.05	-0.04	0.75
13	3/31/15	Paint	100 Building	Room 101	Transom	Wood	D	Intact	Negative	0.03	0.04	0.03	0.04	0.6	0.5
14	3/31/15	Paint	100 Building	Room 101	Transom	Wood	D	Intact	Negative	0.09	0.13	0.09	0.13	0.3	0.59

Little Lake City School District
Studebaker Elementary School

Reading No	Time	Type	Building	Location	Component	Substrate	Side	Condition	Results	PbC	PbC Error	PbL	PbL Error	PbK	PbK Error
15	3/31/15	Paint	100 Building	Room 100	Door	Metal	B	Intact	Negative	0.17	0.07	0.17	0.07	-0.09	0.95
16	3/31/15	Paint	100 Building	Room 100	Door frame	Metal	B	Intact	Negative	0.16	0.06	0.16	0.06	0.4	0.9
17	3/31/15	Paint	100 Building	Room 102	Door	Metal	B	Intact	Negative	0.11	0.14	0.11	0.14	-0.33	1.64
18	3/31/15	Paint	100 Building	Room 102	Door frame	Wood	B	Intact	Negative	0.22	0.07	0.22	0.07	0.3	0.46
19	3/31/15	Paint	100 Building	Room 102	Transom	Wood	B	Intact	Negative	0.27	0.09	0.27	0.09	-0.21	0.43
20	3/31/15	Paint	100 Building	Room 102	Wall	Brick	B	Intact	Negative	0.01	0.02	0.01	0.02	-0.06	0.72
21	3/31/15	Paint	100 Building	Room 102	Baseboard	Wood	B	Intact	Negative	0.04	0.05	0.04	0.05	0.13	0.57
22	3/31/15	Paint	100 Building	Room 102	Door	Metal	D	Intact	Negative	0.07	0.04	0.07	0.04	-0.21	0.6
23	3/31/15	Paint	100 Building	Room 102	Door frame	Wood	D	Intact	Negative	0.05	0.06	0.05	0.06	0.09	0.53
24	3/31/15	Paint	100 Building	Room 102	Transom	Wood	D	Intact	Negative	0.11	0.11	0.11	0.11	-0.14	0.58
25	3/31/15	Paint	100 Building	Room 102	Wall	Brick	D	Intact	Negative	0.02	0.02	0.02	0.02	-0.08	0.58
26	3/31/15	Paint	100 Building	Exterior	Wall	Brick	B	Intact	Negative	0.01	0.02	0.01	0.02	0.12	0.76
27	3/31/15	Paint	100 Building	Exterior	Door	Metal	B	Intact	Negative	-0.22	0.54	0.16	0.06	-0.22	0.54
28	3/31/15	Paint	100 Building	Exterior	Door frame	Metal	B	Intact	Negative	0.17	0.08	0.17	0.08	0.4	0.8

Little Lake City School District
Studebaker Elementary School

Reading No	Time	Type	Building	Location	Component	Substrate	Side	Condition	Results	PbC	PbC Error	PbL	PbL Error	PbK	PbK Error
29	3/31/15	Paint	100 Building	Exterior	Door	Metal	B	Intact	Negative	-0.06	0.61	0.08	0.03	-0.06	0.61
30	3/31/15	Paint	100 Building	Exterior	Door frame	Wood	B	Intact	Negative	0.4	0.1	0.4	0.1	0.3	0.42
31	3/31/15	Paint	100 Building	Exterior	Transom	Wood	B	Intact	Positive	1.5	0.4	1.5	0.4	0.9	0.6
32	3/31/15	Paint	100 Building	Exterior	Conduit	Metal	B	Intact	Negative	0	0.02	0	0.02	0.28	1.77
33	3/31/15	Paint	100 Building	Exterior	Wall	Brick	D	Intact	Negative	0	0.02	0	0.02	-0.35	0.87
34	3/31/15	Paint	100 Building	Exterior	Door	Porcelain	D	Intact	Negative	0.18	0.08	0.18	0.08	-0.15	0.72
35	3/31/15	Paint	100 Building	Exterior	Door frame	Wood	D	Intact	Negative	0.21	0.07	0.21	0.07	0.12	0.46
36	3/31/15	Paint	100 Building	Exterior	Door	Metal	D	Intact	Negative	0.11	0.05	0.11	0.05	-0.01	0.79
37	3/31/15	Paint	100 Building	Exterior	Door frame	Wood	D	Intact	Negative	0.24	0.09	0.24	0.09	0.05	0.51
38	3/31/15	Paint	200 Building	Room 201	Door	Metal	D	Intact	Negative	0.12	0.17	0.12	0.17	0	1.7
39	3/31/15	Paint	200 Building	Room 201	Door frame	Wood	D	Intact	Negative	0.18	0.24	0.18	0.24	0.25	0.6
40	3/31/15	Paint	200 Building	Room 201	Transom	Wood	D	Intact	Negative	0.07	0.1	0.07	0.1	-0.2	0.59
41	3/31/15	Paint	200 Building	Room 201	Wall	Brick	D	Intact	Negative	0.08	0.06	0.08	0.06	0.4	0.6
42	3/31/15	Paint	200 Building	Room 201	Baseboard	Wood	D	Intact	Negative	0.03	0.03	0.03	0.03	0.4	0.5

Little Lake City School District
Studebaker Elementary School

Reading No	Time	Type	Building	Location	Component	Substrate	Side	Condition	Results	PbC	PbC Error	PbL	PbL Error	PbK	PbK Error
43	3/31/15	Paint	200 Building	Room 201	Door	Metal	D	Intact	Negative	0.11	0.08	0.11	0.08	-0.01	0.97
44	3/31/15	Paint	200 Building	Room 201	Door frame	Wood	D	Intact	Negative	0.18	0.09	0.18	0.09	0.08	0.36
45	3/31/15	Paint	200 Building	Room 201	Transom	Wood	D	Intact	Negative	0.09	0.11	0.09	0.11	0.07	0.59
46	3/31/15	Paint	200 Building	Room 201	Conduit	Metal	B	Intact	Negative	-0.24	0.6	0.01	0.02	-0.24	0.6
47	3/31/15	Paint	200 Building	Room 202	Door	Metal	D	Intact	Negative	0.09	0.05	0.09	0.05	-0.29	0.69
48	3/31/15	Paint	200 Building	Room 202	Door frame	Wood	D	Intact	Negative	0.06	0.05	0.06	0.05	0.28	0.5
49	3/31/15	Paint	200 Building	Room 202	Transom	Wood	D	Intact	Negative	0.09	0.12	0.09	0.12	-0.49	1.05
50	3/31/15	Paint	200 Building	Room 202	Wall	Brick	D	Intact	Negative	0.09	0.06	0.09	0.06	0.08	0.69
51	3/31/15	Paint	200 Building	Room 202	Baseboard	Wood	D	Intact	Negative	0.09	0.08	0.09	0.08	0.7	0.4
52	3/31/15	Paint	200 Building	Room 202	Door	Metal	D	Intact	Negative	0.1	0.13	0.1	0.13	-0.27	1.66
53	3/31/15	Paint	200 Building	Room 202	Door frame	Wood	D	Intact	Negative	0.15	0.09	0.15	0.09	0.17	0.47
54	3/31/15	Paint	200 Building	Room 202	Transom	Wood	D	Intact	Negative	0.12	0.09	0.12	0.09	-0.36	0.59
55	3/31/15	Paint	200 Building	Room 200	Wall	Brick	D	Intact	Negative	0	0.02	0	0.02	0.04	0.88
56	3/31/15	Paint	200 Building	Room 200	Door	Metal	D	Intact	Negative	0	0.02	0	0.02	-0.4	0.75

Little Lake City School District
Studebaker Elementary School

Reading No	Time	Type	Building	Location	Component	Substrate	Side	Condition	Results	PbC	PbC Error	PbL	PbL Error	PbK	PbK Error
57	3/31/15	Paint	200 Building	Room 200	Door frame	Wood	D	Intact	Negative	0.13	0.05	0.13	0.05	-0.04	0.48
58	3/31/15	Paint	200 Building	Room 200	Conduit	Metal	D	Intact	Negative	0.07	0.08	0.07	0.08	0.18	0.69
59	3/31/15	Paint	200 Building	Room 203	Door	Metal	D	Intact	Negative	0.16	0.13	0.16	0.13	0.27	1.01
60	3/31/15	Paint	200 Building	Room 203	Door frame	Wood	D	Intact	Negative	0.11	0.06	0.11	0.06	0.24	0.39
61	3/31/15	Paint	200 Building	Room 203	Transom	Wood	D	Intact	Negative	0.08	0.06	0.08	0.06	-0.06	0.47
62	3/31/15	Paint	200 Building	Room 203	Wall	Brick	D	Intact	Negative	0.02	0.02	0.02	0.02	-0.14	0.78
63	3/31/15	Paint	200 Building	Room 203	Baseboard	Wood	D	Intact	Null	0.9	0.4	0.14	0.14	0.9	0.4
64	3/31/15	Paint	200 Building	Room 203	Baseboard	Wood	D	Intact	Negative	0.18	0.19	0.18	0.19	0.22	0.65
65	3/31/15	Paint	200 Building	Room 203	Door	Metal	D	Intact	Negative	0.13	0.11	0.13	0.11	-0.32	0.99
66	3/31/15	Paint	200 Building	Room 203	Door frame	Wood	D	Intact	Negative	0.04	0.06	0.04	0.06	-0.09	0.66
67	3/31/15	Paint	200 Building	Room 203	Transom	Wood	D	Intact	Negative	0.11	0.06	0.11	0.06	-0.33	0.37
68	3/31/15	Paint	200 Building	Room 204	Door	Metal	D	Intact	Negative	0.1	0.06	0.1	0.06	-0.05	0.71
69	3/31/15	Paint	200 Building	Room 204	Door frame	Wood	D	Intact	Negative	0.1	0.06	0.1	0.06	0.5	0.4
70	3/31/15	Paint	200 Building	Room 204	Transom	Wood	D	Intact	Negative	0.1	0.08	0.1	0.08	-0.26	0.52

Little Lake City School District
Studebaker Elementary School

Reading No	Time	Type	Building	Location	Component	Substrate	Side	Condition	Results	PbC	PbC Error	PbL	PbL Error	PbK	PbK Error
71	3/31/15	Paint	200 Building	Room 204	Baseboard	Wood	C	Intact	Negative	0.13	0.07	0.13	0.07	0.4	0.5
72	3/31/15	Paint	200 Building	Room 204	Wall	Brick	D	Intact	Negative	0.05	0.05	0.05	0.05	-0.05	0.75
73	3/31/15	Paint	200 Building	Room 204	Door	Metal	D	Intact	Negative	-0.36	0.81	0.22	0.16	-0.36	0.81
74	3/31/15	Paint	200 Building	Room 204	Door frame	Wood	D	Intact	Negative	0.05	0.04	0.05	0.04	0.15	0.59
75	3/31/15	Paint	200 Building	Room 204	Transom	Wood	D	Intact	Negative	0.2	0.28	0.2	0.28	0.4	1
76	3/31/15	Paint	200 Building	Exterior	Wall	Brick	D	Intact	Negative	0.01	0.02	0.01	0.02	0.13	0.55
77	3/31/15	Paint	200 Building	Exterior	Door	Metal	D	Intact	Negative	0.13	0.09	0.13	0.09	-0.37	1
78	3/31/15	Paint	200 Building	Exterior	Door frame	Wood	D	Intact	Negative	0.21	0.19	0.21	0.19	0.25	1.11
79	3/31/15	Paint	200 Building	Exterior	Transom	Wood	C	Intact	Positive	1.1	0.3	1.1	0.3	0.7	0.5
80	3/31/15	Paint	200 Building	Exterior	Door	Metal	D	Intact	Negative	0	0.02	0	0.02	-0.41	0.83
81	3/31/15	Paint	200 Building	Exterior	Door frame	Wood	D	Intact	Negative	0.13	0.05	0.13	0.05	0.17	0.5
82	3/31/15	Paint	200 Building	Exterior	Door	Metal	D	Intact	Negative	0.12	0.07	0.12	0.07	0.28	0.8
83	3/31/15	Paint	200 Building	Exterior	Door frame	Wood	D	Intact	Negative	0.16	0.19	0.16	0.19	0.28	1.13
84	3/31/15	Paint	200 Building	Exterior	Conduit	Metal	D	Intact	Negative	0.01	0.02	0.01	0.02	0.3	1.02

Little Lake City School District
Studebaker Elementary School

Reading No	Time	Type	Building	Location	Component	Substrate	Side	Condition	Results	PbC	PbC Error	PbL	PbL Error	PbK	PbK Error
85	3/31/15	Paint	200 Building	Exterior	Door	Metal	D	Intact	Negative	0.17	0.08	0.17	0.08	-0.23	0.7
86	3/31/15	Paint	200 Building	Exterior	Door frame	Wood	D	Intact	Negative	0.3	0.12	0.3	0.12	-0.03	0.49
87	3/31/15	Paint	200 Building	Exterior	Door	Metal	D	Intact	Negative	0.07	0.04	0.07	0.04	-0.2	0.71
88	3/31/15	Paint	200 Building	Exterior	Door frame	Wood	D	Intact	Negative	0.24	0.1	0.24	0.1	0.09	0.59
89	3/31/15	Paint	300 Building	Room 300	Door	Metal	A	Intact	Negative	0.06	0.05	0.06	0.05	-0.01	1.01
90	3/31/15	Paint	300 Building	Room 300	Door frame	Wood	A	Intact	Negative	0.02	0.04	0.02	0.04	0.07	0.97
91	3/31/15	Paint	300 Building	Room 300	Wall	Brick	A	Intact	Negative	0	0.02	0	0.02	-0.24	0.76
92	3/31/15	Paint	300 Building	Room 301	Door	Metal	D	Intact	Negative	0.12	0.06	0.12	0.06	-0.17	0.73
93	3/31/15	Paint	300 Building	Room 301	Door frame	Wood	D	Intact	Negative	0.08	0.06	0.08	0.06	0.23	0.54
94	3/31/15	Paint	300 Building	Room 301	Toilet	Wood	D	Intact	Negative	0.06	0.08	0.06	0.08	-0.11	0.68
95	3/31/15	Paint	300 Building	Room 301	Wall	Brick	D	Intact	Negative	0.05	0.03	0.05	0.03	0.2	0.68
96	3/31/15	Paint	300 Building	Room 301	Baseboard	Wood	D	Intact	Negative	0.16	0.09	0.16	0.09	0.5	0.4
97	3/31/15	Paint	300 Building	Room 301	Door	Metal	D	Intact	Negative	0.1	0.07	0.1	0.07	-0.39	1
98	3/31/15	Paint	300 Building	Room 301	Door frame	Wood	D	Intact	Negative	0.07	0.04	0.07	0.04	-0.04	0.47

Little Lake City School District
Studebaker Elementary School

Reading No	Time	Type	Building	Location	Component	Substrate	Side	Condition	Results	PbC	PbC Error	PbL	PbL Error	PbK	PbK Error
99	3/31/15	Paint	300 Building	Room 301	Transom	Wood	D	Intact	Negative	0.08	0.05	0.08	0.05	-0.32	0.43
100	3/31/15	Paint	300 Building	Room 302	Door	Metal	D	Intact	Negative	0.08	0.05	0.08	0.05	0.21	0.73
101	3/31/15	Paint	300 Building	Room 302	Door frame	Wood	D	Intact	Negative	0.28	0.14	0.28	0.14	0.05	0.44
102	3/31/15	Paint	300 Building	Room 302	Transom	Wood	D	Intact	Negative	0.16	0.25	0.16	0.25	-0.23	0.65
103	3/31/15	Paint	300 Building	Room 302	Wall	Brick	D	Intact	Negative	0.02	0.02	0.02	0.02	0.01	0.77
104	3/31/15	Paint	300 Building	Room 302	Baseboard	Wood	D	Intact	Negative	0.09	0.06	0.09	0.06	0.07	0.41
105	3/31/15	Paint	300 Building	Room 302	Door	Metal	D	Intact	Negative	0.16	0.08	0.16	0.08	-0.17	0.73
106	3/31/15	Paint	300 Building	Room 302	Door frame	Wood	C	Intact	Negative	0.12	0.08	0.12	0.08	-0.36	0.57
107	3/31/15	Paint	300 Building	Room 302	Transom	Wood	D	Intact	Negative	0.1	0.11	0.1	0.11	-0.07	1.11
108	3/31/15	Paint	300 Building	Room 303	Door	Metal	D	Intact	Negative	0.13	0.11	0.13	0.11	-0.48	1.08
109	3/31/15	Paint	300 Building	Room 303	Door frame	Wood	D	Intact	Negative	0.06	0.04	0.06	0.04	0.1	0.4
110	3/31/15	Paint	300 Building	Room 303	Transom	Wood	D	Intact	Negative	0.12	0.07	0.12	0.07	-0.3	0.43
111	3/31/15	Paint	300 Building	Room 303	Wall	Brick	D	Intact	Negative	0.02	0.02	0.02	0.02	0.06	0.74
112	3/31/15	Paint	300 Building	Room 303	Baseboard	Wood	D	Intact	Negative	0.03	0.05	0.03	0.05	0.3	1.01

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Reading No	Time	Type	Building	Location	Component	Substrate	Side	Condition	Results	PbC	PbC Error	PbL	PbL Error	PbK	PbK Error
113	3/31/15	Paint	300 Building	Room 303	Door frame	Metal	D	Intact	Negative	0.2	0.14	0.2	0.14	-0.48	0.94
114	3/31/15	Paint	300 Building	Room 303	Door frame	Wood	D	Intact	Negative	0.06	0.03	0.06	0.03	0.18	0.36
115	3/31/15	Paint	300 Building	Room 303	Transom	Wood	D	Intact	Negative	0.11	0.06	0.11	0.06	-0.34	0.43
116	3/31/15	Paint	300 Building	Room 304	Door	Metal	D	Intact	Negative	0.08	0.06	0.08	0.06	0.18	1.09
117	3/31/15	Paint	300 Building	Room 304	Door frame	Wood	D	Intact	Negative	0.22	0.08	0.22	0.08	0.4	0.4
118	3/31/15	Paint	300 Building	Room 304	Transom	Wood	D	Intact	Negative	0.12	0.1	0.12	0.1	-0.44	0.6
119	3/31/15	Paint	300 Building	Room 304	Wall	Brick	D	Intact	Negative	0.07	0.04	0.07	0.04	-0.16	0.6
120	3/31/15	Paint	300 Building	Room 304	Baseboard	Wood	D	Intact	Negative	0.1	0.11	0.1	0.11	-0.16	0.6
121	3/31/15	Paint	300 Building	Room 304	Door	Metal	D	Intact	Negative	0.1	0.06	0.1	0.06	0.18	0.95
122	3/31/15	Paint	300 Building	Room 304	Door frame	Wood	D	Intact	Negative	0.18	0.1	0.18	0.1	0.23	0.52
123	3/31/15	Paint	300 Building	Room 304	Transom	Wood	D	Intact	Negative	0.11	0.06	0.11	0.06	-0.13	0.46
124	3/31/15	Paint	300 Building	Exterior	Wall	Brick	D	Intact	Negative	0	0.02	0	0.02	-0.04	0.78
125	3/31/15	Paint	300 Building	Exterior	Door	Metal	D	Intact	Negative	-0.35	0.88	0.2	0.11	-0.35	0.88
126	3/31/15	Paint	300 Building	Exterior	Door frame	Wood	D	Intact	Negative	0.17	0.07	0.17	0.07	0.5	0.5

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Reading No	Time	Type	Building	Location	Component	Substrate	Side	Condition	Results	PbC	PbC Error	PbL	PbL Error	PbK	PbK Error
127	3/31/15	Paint	300 Building	Exterior	Transom	Wood	D	Intact	Positive	1.9	0.5	1.9	0.5	1.8	0.7
128	3/31/15	Paint	300 Building	Exterior	Door	Metal	D	Intact	Negative	0.12	0.11	0.12	0.11	0.1	1.68
129	3/31/15	Paint	300 Building	Exterior	Door frame	Wood	D	Intact	Negative	0.21	0.21	0.21	0.21	-0.16	1.26
130	3/31/15	Paint	300 Building	Exterior	Door	Metal	D	Intact	Negative	-0.26	0.76	0.24	0.11	-0.26	0.76
131	3/31/15	Paint	300 Building	Exterior	Door frame	Wood	D	Intact	Negative	0.2	0.15	0.2	0.15	0.05	1.05
132	3/31/15	Paint	300 Building	Exterior	Door	Metal	A	Intact	Negative	-0.51	0.83	0.11	0.06	-0.51	0.83
133	3/31/15	Paint	300 Building	Exterior	Door frame	Wood	A	Intact	Negative	0.14	0.06	0.14	0.06	-0.09	0.44
134	3/31/15	Paint			Calibrate				Positive	1.7	0.4	1.7	0.4	1.4	1.8
135	3/31/15	Paint			Calibrate				Positive	1.6	0.3	1.6	0.3	1.2	1.7
136	3/31/15	Paint			Calibrate				Positive	1.6	0.3	1.6	0.3	0.7	0.9
137	3/31/15	Paint			Shutter calibrate					4.52	0	0.92	0	0.01	0
138	3/31/15	Paint			Calibrate				Positive	1.5	0.3	1.5	0.3	1.6	1.6
139	3/31/15	Paint			Calibrate				Positive	1.6	0.3	1.6	0.3	1.4	0.9
140	3/31/15	Paint			Calibrate				Positive	1.7	0.4	1.7	0.4	0.9	1.6

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Reading No	Time	Type	Building	Location	Component	Substrate	Side	Condition	Results	PbC	PbC Error	PbL	PbL Error	PbK	PbK Error
141	3/31/15	Paint	400 Building	Room 400	Wall	Brick	A	Intact	Negative	0.02	0.02	0.02	0.02	0.28	0.72
142	3/31/15	Paint	400 Building	Room 400	Door	Metal	A	Intact	Negative	0	0.02	0	0.02	-0.64	0.75
143	3/31/15	Paint	400 Building	Room 400	Door frame	Wood	A	Intact	Negative	0.04	0.03	0.04	0.03	0.09	0.46
144	3/31/15	Paint	400 Building	Room 401	Door	Metal	D	Intact	Negative	0.25	0.17	0.25	0.17	0.15	0.97
145	3/31/15	Paint	400 Building	Room 401	Door frame	Wood	D	Intact	Negative	0.09	0.05	0.09	0.05	-0.1	0.48
146	3/31/15	Paint	400 Building	Room 401	Transom	Wood	C	Intact	Negative	0.08	0.07	0.08	0.07	-0.33	0.58
147	3/31/15	Paint	400 Building	Room 401	Wall	Brick	D	Intact	Negative	0.03	0.03	0.03	0.03	-0.33	0.77
148	3/31/15	Paint	400 Building	Room 401	Baseboard	Wood	D	Intact	Negative	0.09	0.1	0.09	0.1	0.13	0.61
149	3/31/15	Paint	400 Building	Room 401	Conduit	Metal	D	Intact	Negative	0	0.02	0	0.02	0.01	0.83
150	3/31/15	Paint	400 Building	Room 401	Tackboard	Wood	D	Intact	Negative	0	0.02	0	0.02	0.05	0.48
151	3/31/15	Paint	400 Building	Room 401	Door	Metal	D	Intact	Negative	0.09	0.06	0.09	0.06	0.12	0.94
152	3/31/15	Paint	400 Building	Room 401	Door frame	Wood	D	Intact	Negative	0.15	0.11	0.15	0.11	0.4	0.6
153	3/31/15	Paint	400 Building	Room 401	Door frame	Wood	D	Intact	Negative	0.14	0.08	0.14	0.08	-0.09	0.53
154	3/31/15	Paint	400 Building	Room 401	Transom	Wood	D	Intact	Negative	0.17	0.13	0.17	0.13	-0.25	0.58

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Reading No	Time	Type	Building	Location	Component	Substrate	Side	Condition	Results	PbC	PbC Error	PbL	PbL Error	PbK	PbK Error
155	3/31/15	Paint	400 Building	Room 402	Door	Metal	D	Intact	Negative	0.14	0.15	0.14	0.15	-0.68	1.74
156	3/31/15	Paint	400 Building	Room 402	Door frame	Wood	D	Intact	Negative	0.13	0.09	0.13	0.09	0.1	0.68
157	3/31/15	Paint	400 Building	Room 402	Transom	Wood	D	Intact	Negative	-0.18	0.52	0.4	0.2	-0.18	0.52
158	3/31/15	Paint	400 Building	Room 402	Wall	Brick	D	Intact	Negative	0.03	0.03	0.03	0.03	-0.2	0.73
159	3/31/15	Paint	400 Building	Room 402	Baseboard	Wood	D	Intact	Negative	0.12	0.06	0.12	0.06	0.09	0.49
160	3/31/15	Paint	400 Building	Room 402	Conduit	Metal	D	Intact	Negative	0	0.02	0	0.02	0.11	0.89
161	3/31/15	Paint	400 Building	Room 402	Door	Metal	D	Intact	Negative	0.1	0.05	0.1	0.05	-0.17	0.74
162	3/31/15	Paint	400 Building	Room 402	Door frame	Wood	D	Intact	Negative	0.05	0.03	0.05	0.03	-0.02	0.43
163	3/31/15	Paint	400 Building	Room 402	Transom	Wood	D	Intact	Negative	0.12	0.1	0.12	0.1	-0.27	0.62
164	3/31/15	Paint	400 Building	Room 403	Door	Metal	D	Intact	Negative	0.14	0.07	0.14	0.07	-0.4	0.82
165	3/31/15	Paint	400 Building	Room 403	Door frame	Wood	D	Intact	Negative	0.05	0.03	0.05	0.03	-0.08	0.5
166	3/31/15	Paint	400 Building	Room 403	Transom	Wood	D	Intact	Negative	0.05	0.05	0.05	0.05	-0.39	0.56
167	3/31/15	Paint	400 Building	Room 403	Wall	Brick	D	Intact	Negative	0.02	0.02	0.02	0.02	-0.05	0.79
168	3/31/15	Paint	400 Building	Room 403	Baseboard	Wood	D	Intact	Negative	0.13	0.19	0.13	0.19	0.3	1.21

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Reading No	Time	Type	Building	Location	Component	Substrate	Side	Condition	Results	PbC	PbC Error	PbL	PbL Error	PbK	PbK Error
169	3/31/15	Paint	400 Building	Room 403	Conduit	Metal	D	Intact	Negative	0	0.02	0	0.02	-0.21	0.96
170	3/31/15	Paint	400 Building	Room 403	Door	Metal	D	Intact	Negative	0.11	0.11	0.11	0.11	-0.07	1.68
171	3/31/15	Paint	400 Building	Room 403	Door frame	Wood	D	Intact	Negative	0.17	0.12	0.17	0.12	-0.17	0.58
172	3/31/15	Paint	400 Building	Room 403	Transom	Wood	D	Intact	Negative	0.07	0.04	0.07	0.04	-0.49	0.41
173	3/31/15	Paint	400 Building	Room 403	Wall	Brick	D	Intact	Negative	0.03	0.03	0.03	0.03	-0.29	0.87
174	3/31/15	Paint	400 Building	Room 404	Door	Metal	D	Intact	Negative	0.19	0.14	0.19	0.14	-0.28	0.93
175	3/31/15	Paint	400 Building	Room 404	Door frame	Wood	D	Intact	Negative	0.3	0.26	0.3	0.26	0	0.76
176	3/31/15	Paint	400 Building	Room 404	Transom	Wood	D	Intact	Negative	0.11	0.17	0.11	0.17	-0.4	1.05
177	3/31/15	Paint	400 Building	Room 404	Wall	Brick	D	Intact	Negative	0.05	0.05	0.05	0.05	-0.45	0.98
178	3/31/15	Paint	400 Building	Room 404	Bookcase	Wood	D	Intact	Negative	0.21	0.07	0.21	0.07	0.4	0.6
179	3/31/15	Paint	400 Building	Room 404	Door	Metal	D	Intact	Negative	0.09	0.13	0.09	0.13	-0.35	1.82
180	3/31/15	Paint	400 Building	Room 404	Door frame	Wood	D	Intact	Negative	0.2	0.11	0.2	0.11	0.17	0.56
181	3/31/15	Paint	400 Building	Room 404	Window frame	Wood	D	Intact	Negative	0.07	0.05	0.07	0.05	-0.51	0.48
182	3/31/15	Paint	400 Building	Room 404	Conduit	Metal	D	Intact	Negative	0.01	0.05	0.01	0.05	0.03	0.85

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Reading No	Time	Type	Building	Location	Component	Substrate	Side	Condition	Results	PbC	PbC Error	PbL	PbL Error	PbK	PbK Error
183	3/31/15	Paint	400 Building	Room 404	Tackboard	Wood	D	Intact	Negative	0.01	0.02	0.01	0.02	0.5	0.4
184	3/31/15	Paint	400 Building	Exterior	Wall	Brick	D	Intact	Negative	0.01	0.02	0.01	0.02	-0.29	0.79
185	3/31/15	Paint	400 Building	Exterior	Door	Metal	D	Intact	Negative	0.12	0.06	0.12	0.06	0.03	0.75
186	3/31/15	Paint	400 Building	Exterior	Door frame	Wood	D	Intact	Negative	0.23	0.08	0.23	0.08	0.4	0.4
187	3/31/15	Paint	400 Building	Exterior	Conduit	Metal	D	Intact	Null	0.07	0.07	0.07	0.07	0.17	0.55
188	3/31/15	Paint	400 Building	Exterior	Conduit	Metal	D	Intact	Negative	0.03	0.05	0.03	0.05	0.25	0.87
189	3/31/15	Paint	400 Building	Exterior	Transom	Wood	D	Intact	Positive	1.7	0.4	1.7	0.4	1.6	0.7
190	3/31/15	Paint	400 Building	Exterior	Door	Metal	D	Intact	Negative	0.2	0.13	0.2	0.13	-0.35	1.01
191	3/31/15	Paint	400 Building	Exterior	Door frame	Wood	D	Intact	Negative	0.4	0.1	0.4	0.1	0.4	0.6
192	3/31/15	Paint	400 Building	Exterior	Door	Metal	D	Intact	Negative	0.09	0.04	0.09	0.04	-0.12	0.7
193	3/31/15	Paint	400 Building	Exterior	Door frame	Wood	D	Intact	Negative	0	0.02	0	0.02	0.16	0.44
194	3/31/15	Paint	400 Building	Exterior	Door	Metal	A	Intact	Negative	0	0.02	0	0.02	-0.4	0.83
195	3/31/15	Paint	400 Building	Exterior	Door frame	Wood	A	Intact	Negative	0.21	0.2	0.21	0.2	0.2	1.13
196	3/31/15	Paint	400 Building	Exterior	Wall	Brick	A	Intact	Negative	0	0.02	0	0.02	-0.15	0.69

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Reading No	Time	Type	Building	Location	Component	Substrate	Side	Condition	Results	PbC	PbC Error	PbL	PbL Error	PbK	PbK Error
197	3/31/15	Paint	500 Building	Room 500	Wall	Brick	C	Intact	Negative	0.02	0.02	0.02	0.02	-0.27	0.82
198	3/31/15	Paint	500 Building	Room 500	Door	Metal	C	Intact	Negative	0	0.02	0	0.02	-0.3	0.6
199	3/31/15	Paint	500 Building	Room 500	Door frame	Wood	C	Intact	Negative	0.01	0.02	0.01	0.02	-0.05	0.56
200	3/31/15	Paint	500 Building	Room 500	Conduit	Metal	C	Intact	Negative	0	0.02	0	0.02	0.21	1.55
201	3/31/15	Paint	500 Building	Room 500	Pipe	Metal	C	Intact	Negative	-0.26	0.67	0.21	0.18	-0.26	0.67
202	3/31/15	Paint	500 Building	Room 501	Door	Metal	D	Intact	Negative	0.27	0.14	0.27	0.14	-0.29	0.97
203	3/31/15	Paint	500 Building	Room 501	Door frame	Wood	D	Intact	Negative	0.07	0.05	0.07	0.05	-0.14	0.55
204	3/31/15	Paint	500 Building	Room 501	Transom	Wood	D	Intact	Negative	0.08	0.06	0.08	0.06	-0.24	0.6
205	3/31/15	Paint	500 Building	Room 501	Wall	Brick	D	Intact	Negative	0.03	0.02	0.03	0.02	-0.39	0.71
206	3/31/15	Paint	500 Building	Room 501	Baseboard	Wood	D	Intact	Negative	0.13	0.15	0.13	0.15	0.07	0.64
207	3/31/15	Paint	500 Building	Room 501	Conduit	Metal	D	Intact	Negative	0	0.02	0	0.02	0.5	0.9
208	3/31/15	Paint	500 Building	Room 501	Door	Metal	D	Intact	Negative	0.25	0.12	0.25	0.12	-0.19	0.71
209	3/31/15	Paint	500 Building	Room 501	Door frame	Wood	D	Intact	Negative	0.05	0.03	0.05	0.03	-0.02	0.47
210	3/31/15	Paint	500 Building	Room 501	Transom	Wood	D	Intact	Negative	0.13	0.08	0.13	0.08	-0.37	0.58

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Reading No	Time	Type	Building	Location	Component	Substrate	Side	Condition	Results	PbC	PbC Error	PbL	PbL Error	PbK	PbK Error
211	3/31/15	Paint	500 Building	Room 502	Drain	Metal	D	Intact	Negative	0.18	0.09	0.18	0.09	0.12	0.74
212	3/31/15	Paint	500 Building	Room 502	Door frame	Wood	D	Intact	Negative	0.12	0.07	0.12	0.07	0.26	0.63
213	3/31/15	Paint	500 Building	Room 502	Transom	Wood	D	Intact	Negative	0.21	0.1	0.21	0.1	-0.27	0.45
214	3/31/15	Paint	500 Building	Room 502	Baseboard	Wood	D	Intact	Negative	0.14	0.09	0.14	0.09	0.7	0.9
215	3/31/15	Paint	500 Building	Room 502	Wall	Brick	D	Intact	Negative	0.02	0.03	0.02	0.03	-0.45	0.87
216	3/31/15	Paint	500 Building	Room 502	Door	Metal	D	Intact	Negative	0.2	0.12	0.2	0.12	-0.08	0.95
217	3/31/15	Paint	500 Building	Room 502	Door frame	Wood	D	Intact	Negative	0.13	0.12	0.13	0.12	0.11	0.68
218	3/31/15	Paint	500 Building	Room 502	Window frame	Wood	D	Intact	Negative	0.27	0.25	0.27	0.25	-0.26	0.62
219	3/31/15	Paint	500 Building	Room 503	Door	Metal	D	Intact	Negative	0.13	0.06	0.13	0.06	-0.49	0.69
220	3/31/15	Paint	500 Building	Room 503	Door frame	Wood	D	Intact	Negative	0.17	0.1	0.17	0.1	0.02	0.6
221	3/31/15	Paint	500 Building	Room 503	Transom	Wood	D	Intact	Negative	0.23	0.13	0.23	0.13	-0.3	0.52
222	3/31/15	Paint	500 Building	Room 503	Wall	Brick	D	Intact	Negative	0.05	0.04	0.05	0.04	-0.52	0.79
223	3/31/15	Paint	500 Building	Room 503	Baseboard	Wood	D	Intact	Negative	0.08	0.05	0.08	0.05	-0.01	0.5
224	3/31/15	Paint	500 Building	Room 503	Conduit	Metal	D	Intact	Negative	0.01	0.02	0.01	0.02	0.21	0.84

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Reading No	Time	Type	Building	Location	Component	Substrate	Side	Condition	Results	PbC	PbC Error	PbL	PbL Error	PbK	PbK Error
225	3/31/15	Paint	500 Building	Room 503	Door	Metal	D	Intact	Negative	0.22	0.23	0.22	0.23	-0.08	1.88
226	3/31/15	Paint	500 Building	Room 503	Door frame	Wood	D	Intact	Negative	0.08	0.05	0.08	0.05	-0.06	0.51
227	3/31/15	Paint	500 Building	Room 503	Transom	Wood	D	Intact	Negative	0.24	0.17	0.24	0.17	-0.38	0.66
228	3/31/15	Paint	500 Building	Room 504	Door	Metal	D	Intact	Negative	0	0.02	0	0.02	-0.11	0.44
229	3/31/15	Paint	500 Building	Room 504	Door frame	Wood	D	Intact	Null	0.29	0.22	0.29	0.22	0.13	0.6
230	3/31/15	Paint	500 Building	Room 504	Door frame	Wood	D	Intact	Negative	0.1	0.47	0.3	0.2	0.1	0.47
231	3/31/15	Paint	500 Building	Room 504	Transom	Wood	D	Intact	Negative	0.16	0.08	0.16	0.08	-0.17	0.42
232	3/31/15	Paint	500 Building	Room 504	Wall	Brick	D	Intact	Negative	0.04	0.05	0.04	0.05	-0.14	0.77
233	3/31/15	Paint	500 Building	Room 504	Baseboard	Wood	D	Intact	Negative	0.11	0.08	0.11	0.08	0.3	0.58
234	3/31/15	Paint	500 Building	Room 504	Door	Metal	D	Intact	Negative	0.18	0.09	0.18	0.09	0.05	0.98
235	3/31/15	Paint	500 Building	Room 504	Door frame	Wood	D	Intact	Negative	0	0.02	0	0.02	0.09	0.41
236	3/31/15	Paint	500 Building	Room 504	Transom	Wood	D	Intact	Negative	-0.24	0.46	0.23	0.14	-0.24	0.46
237	3/31/15	Paint	500 Building	Exterior	Wall	Brick	C	Intact	Negative	0.01	0.02	0.01	0.02	-0.17	0.81
238	3/31/15	Paint	500 Building	Exterior	Door	Metal	C	Peeling	Negative	0	0.02	0	0.02	-0.15	0.6

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Reading No	Time	Type	Building	Location	Component	Substrate	Side	Condition	Results	PbC	PbC Error	PbL	PbL Error	PbK	PbK Error
239	3/31/15	Paint	500 Building	Exterior	Door frame	Wood	C	Intact	Negative	0.19	0.17	0.19	0.17	0.27	1.09
240	3/31/15	Paint	500 Building	Exterior	Door frame	Wood	C	Intact	Negative	0	0.02	0	0.02	-0.1	0.53
241	3/31/15	Paint	500 Building	Exterior	Door frame	Wood	C	Intact	Negative	0	0.02	0	0.02	-0.01	1.14
242	3/31/15	Paint	500 Building	Exterior	Wall	Brick	D	Intact	Negative	0.02	0.03	0.02	0.03	-0.26	0.8
243	3/31/15	Paint	500 Building	Exterior	Door	Metal	D	Intact	Negative	-0.45	0.85	0.3	0.15	-0.45	0.85
244	3/31/15	Paint	500 Building	Exterior	Door frame	Wood	D	Intact	Negative	0.25	0.15	0.25	0.15	-0.16	0.56
245	3/31/15	Paint	500 Building	Exterior	Transom	Wood	D	Intact	Positive	1.4	0.4	1.4	0.4	0.8	0.7
246	3/31/15	Paint	500 Building	Exterior	Door	Metal	D	Intact	Negative	-0.5	0.82	0.13	0.07	-0.5	0.82
247	3/31/15	Paint	500 Building	Exterior	Door frame	Wood	D	Intact	Negative	0.22	0.18	0.22	0.18	0	0.71
248	3/31/15	Paint	500 Building	Exterior	Conduit	Metal	D	Intact	Null	0.06	0.09	0.06	0.09	0.23	0.74
249	3/31/15	Paint	500 Building	Exterior	Conduit	Metal	D	Intact	Null	0.7	0.3	0.07	0.05	0.7	0.3
250	3/31/15	Paint	500 Building	Exterior	Conduit	Metal	D	Intact	Null	0.4	0.4	0.4	0.4	0.13	1.63
251	3/31/15	Paint	500 Building	Exterior	Conduit	Metal	D	Intact	Negative	0.23	0.13	0.23	0.13	0.22	1.01
252	3/31/15	Paint	500 Building	Exterior	Door	Metal	D	Intact	Negative	-0.13	0.66	0.23	0.1	-0.13	0.66

Little Lake City School District
Studebaker Elementary School

Reading No	Time	Type	Building	Location	Component	Substrate	Side	Condition	Results	PbC	PbC Error	PbL	PbL Error	PbK	PbK Error
253	3/31/15	Paint	500 Building	Exterior	Door frame	Wood	D	Intact	Negative	0.3	0.33	0.3	0.33	0.06	1.27
254	3/31/15	Paint	500 Building	Exterior	Door	Metal	D	Intact	Negative	-0.1	0.58	0.28	0.08	-0.1	0.58
255	3/31/15	Paint	500 Building	Exterior	Door frame	Wood	D	Intact	Negative	0.4	0.2	0.4	0.2	0.08	0.72
256	3/31/15	Paint			Calibrate				Positive	1.5	0.3	1.5	0.3	1.1	1.7
257	3/31/15	Paint			Calibrate				Positive	1.7	0.4	1.7	0.4	0.7	1.7
258	3/31/15	Paint			Calibrate				Positive	1.5	0.3	1.5	0.3	0.9	0.9
259	4/1/15	Paint			Shutter calibrate					5.41	0	0.78	0	0	0
260	4/1/15	Paint			Calibrate				Positive	1.4	0.3	1.4	0.3	1.2	0.9
261	4/1/15	Paint			Calibrate				Positive	1.6	0.3	1.6	0.3	1.5	0.8
262	4/1/15	Paint			Calibrate				Positive	1.6	0.4	1.6	0.4	1.4	1.9
263	4/1/15	Paint	600 Building	Room 600	Wall	Brick	C	Intact	Negative	0	0.02	0	0.02	0.4	0.8
264	4/1/15	Paint	600 Building	Room 600	Door	Metal	C	Intact	Negative	0.05	0.04	0.05	0.04	-0.18	0.95
265	4/1/15	Paint	600 Building	Room 600	Door frame	Wood	C	Intact	Positive	1.9	0.7	0.6	0.1	1.9	0.7
266	4/1/15	Paint	600 Building	Room 601	Door	Metal	D	Intact	Negative	0.06	0.06	0.06	0.06	-0.26	0.98

Little Lake City School District
Studebaker Elementary School

Reading No	Time	Type	Building	Location	Component	Substrate	Side	Condition	Results	PbC	PbC Error	PbL	PbL Error	PbK	PbK Error
267	4/1/15	Paint	600 Building	Room 601	Door frame	Wood	D	Intact	Negative	0.25	0.19	0.25	0.19	0.26	0.58
268	4/1/15	Paint	600 Building	Room 601	Transom	Wood	D	Intact	Negative	0.6	0.1	0.6	0.1	0.4	0.2
269	4/1/15	Paint	600 Building	Room 601	Conduit	Metal	D	Intact	Negative	0	0.02	0	0.02	-0.02	0.7
270	4/1/15	Paint	600 Building	Room 601	Wall	Brick	D	Intact	Negative	0.04	0.03	0.04	0.03	0.2	0.73
271	4/1/15	Paint	600 Building	Room 601	Baseboard	Wood	D	Intact	Positive	1	0.3	0.03	0.04	1	0.3
272	4/1/15	Paint	600 Building	Room 601	Door	Metal	D	Intact	Negative	0.02	0.02	0.02	0.02	-0.25	0.64
273	4/1/15	Paint	600 Building	Room 601	Door frame	Wood	D	Intact	Negative	0.4	0.1	0.4	0.1	0.6	0.4
274	4/1/15	Paint	600 Building	Room 601	Transom	Wood	D	Intact	Negative	0.4	0.2	0.4	0.2	0.16	0.52
275	4/1/15	Paint	600 Building	Room 602	Door	Metal	D	Intact	Negative	0.1	0.08	0.1	0.08	-0.24	0.67
276	4/1/15	Paint	600 Building	Room 602	Door frame	Wood	D	Intact	Negative	0.16	0.16	0.16	0.16	0.8	1
277	4/1/15	Paint	600 Building	Room 602	Transom	Wood	D	Intact	Negative	0.23	0.11	0.23	0.11	-0.04	0.48
278	4/1/15	Paint	600 Building	Room 602	Wall	Brick	D	Intact	Negative	0.02	0.03	0.02	0.03	0	0.81
279	4/1/15	Paint	600 Building	Room 602	Door	Metal	D	Intact	Negative	0.06	0.05	0.06	0.05	-0.3	0.69
280	4/1/15	Paint	600 Building	Room 602	Door frame	Wood	D	Intact	Negative	0.3	0.17	0.3	0.17	0.7	0.6

Little Lake City School District
Studebaker Elementary School

Reading No	Time	Type	Building	Location	Component	Substrate	Side	Condition	Results	PbC	PbC Error	PbL	PbL Error	PbK	PbK Error
281	4/1/15	Paint	600 Building	Room 602	Transom	Wood	D	Intact	Negative	0.4	0.1	0.4	0.1	0.5	0.5
282	4/1/15	Paint	600 Building	Room 602	Conduit	Metal	D	Intact	Negative	0	0.02	0	0.02	0	0.9
283	4/1/15	Paint	600 Building	Room 603	Door	Metal	D	Intact	Negative	0.03	0.03	0.03	0.03	-0.04	0.76
284	4/1/15	Paint	600 Building	Room 603	Door frame	Wood	D	Intact	Null	0.6	0.2	0.6	0.2	0.7	0.4
285	4/1/15	Paint	600 Building	Room 603	Door frame	Wood	D	Intact	Negative	0.23	0.17	0.23	0.17	0.6	0.6
286	4/1/15	Paint	600 Building	Room 603	Wall	Brick	D	Intact	Negative	0	0.02	0	0.02	0.12	0.9
287	4/1/15	Paint	600 Building	Room 603	Transom	Wood	D	Intact	Negative	0.3	0.14	0.3	0.14	0.13	0.6
288	4/1/15	Paint	600 Building	Room 603	Door	Metal	D	Intact	Negative	0.03	0.02	0.03	0.02	-0.5	0.68
289	4/1/15	Paint	600 Building	Room 603	Door frame	Wood	D	Intact	Negative	0	0.02	0	0.02	0.03	0.94
290	4/1/15	Paint	600 Building	Room 603	Transom	Wood	D	Intact	Negative	0.3	0.17	0.3	0.17	0.18	0.5
291	4/1/15	Paint	600 Building	Room 604	Door	Metal	D	Intact	Negative	0	0.02	0	0.02	0.3	0.42
292	4/1/15	Paint	600 Building	Room 604	Door frame	Wood	D	Intact	Negative	0	0.02	0	0.02	0.24	0.59
293	4/1/15	Paint	600 Building	Room 604	Transom	Wood	D	Intact	Negative	0	0.02	0	0.02	0.4	1.1
294	4/1/15	Paint	600 Building	Room 604	Wall	Brick	D	Intact	Negative	0.02	0.02	0.02	0.02	0.3	0.74

Little Lake City School District
Studebaker Elementary School

Reading No	Time	Type	Building	Location	Component	Substrate	Side	Condition	Results	PbC	PbC Error	PbL	PbL Error	PbK	PbK Error
295	4/1/15	Paint	600 Building	Room 604	Door	Metal	D	Intact	Negative	0	0.02	0	0.02	-0.11	0.63
296	4/1/15	Paint	600 Building	Room 604	Door frame	Wood	C	Intact	Negative	0	0.02	0	0.02	0.23	0.45
297	4/1/15	Paint	600 Building	Room 604	Transom	Wood	D	Intact	Negative	0	0.02	0	0.02	0.19	0.48
298	4/1/15	Paint	600 Building	Exterior	Wall	Brick	C	Intact	Null	0.03	0.13	0.03	0.13	0.8	2.4
299	4/1/15	Paint	600 Building	Exterior	Wall	Brick	C	Intact	Negative	0	0.02	0	0.02	0.27	0.71
300	4/1/15	Paint	600 Building	Exterior	Door	Metal	C	Intact	Negative	0.1	0.13	0.1	0.13	-0.25	1.76
301	4/1/15	Paint	600 Building	Exterior	Door frame	Wood	C	Poor	Negative	0.11	0.07	0.11	0.07	0.6	0.5
302	4/1/15	Paint	600 Building	Exterior	Conduit	Metal	C	Intact	Negative	0.15	0.21	0.15	0.21	0.12	0.95
303	4/1/15	Paint	600 Building	Exterior	Wall	Brick	D	Intact	Negative	0.01	0.02	0.01	0.02	0.3	0.76
304	4/1/15	Paint	600 Building	Exterior	Door	Metal	D	Intact	Negative	0	0.02	0	0.02	0.12	0.98
305	4/1/15	Paint	600 Building	Exterior	Door frame	Wood	D	Intact	Negative	0.01	0.02	0.01	0.02	0.6	0.6
306	4/1/15	Paint	600 Building	Exterior	Conduit	Metal	D	Intact	Null	0.01	0.02	0.01	0.02	0.07	0.74
307	4/1/15	Paint	600 Building	Exterior	Conduit	Metal	D	Intact	Negative	0.26	0.42	0.04	0.03	0.26	0.42
308	4/1/15	Paint	600 Building	Exterior	Transom	Wood	D	Intact	Negative	0.07	0.11	0.07	0.11	0.17	0.96

Little Lake City School District
Studebaker Elementary School

Reading No	Time	Type	Building	Location	Component	Substrate	Side	Condition	Results	PbC	PbC Error	PbL	PbL Error	PbK	PbK Error
309	4/1/15	Paint	600 Building	Exterior	Door	Metal	D	Intact	Negative	-0.57	0.76	0.07	0.05	-0.57	0.76
310	4/1/15	Paint	600 Building	Exterior	Door frame	Wood	D	Intact	Negative	0	0.02	0	0.02	0.27	0.28
311	4/1/15	Paint	600 Building	Exterior	Transom	Wood	D	Intact	Null	0.16	0.34	0.16	0.34	-0.07	0.92
312	4/1/15	Paint	600 Building	Exterior	Transom	Wood	D	Intact	Negative	0.07	0.06	0.07	0.06	0.05	0.38
313	4/1/15	Paint	600 Building	Exterior	Door	Metal	D	Intact	Negative	-0.35	0.5	0.09	0.04	-0.35	0.5
314	4/1/15	Paint	600 Building	Exterior	Door frame	Wood	D	Intact	Negative	0.04	0.08	0.04	0.08	0.5	0.5
315	4/1/15	Paint	600 Building	Exterior	Transom	Wood	D	Intact	Negative	0.08	0.06	0.08	0.06	0.13	0.4
316	4/1/15	Paint	600 Building	Exterior	Door	Metal	D	Intact	Negative	0.06	0.04	0.06	0.04	-0.11	0.68
317	4/1/15	Paint	600 Building	Exterior	Door frame	Wood	D	Intact	Negative	0.5	0.2	0.5	0.2	0.6	0.4
318	4/1/15	Paint	600 Building	Exterior	Transom	Wood	D	Intact	Negative	0.06	0.04	0.06	0.04	0.07	0.4
319	4/1/15	Paint	Administration Building	Lounge	Wall	Brick	B	Intact	Negative	0.09	0.04	0.09	0.04	0.6	0.5
320	4/1/15	Paint	Administration Building	Lounge	Door	Metal	B	Intact	Negative	-0.32	0.71	0.12	0.1	-0.32	0.71
321	4/1/15	Paint	Administration Building	Lounge	Door frame	Wood	B	Intact	Negative	0	0.02	0	0.02	0.15	0.51
322	4/1/15	Paint	Administration Building	Lounge	Transom	Wood	B	Intact	Negative	0	0.02	0	0.02	0.08	0.39

Little Lake City School District
Studebaker Elementary School

Reading No	Time	Type	Building	Location	Component	Substrate	Side	Condition	Results	PbC	PbC Error	PbL	PbL Error	PbK	PbK Error
323	4/1/15	Paint	Administration Building	Lounge	Baseboard	Wood	B	Peeling	Negative	0.24	0.32	0.24	0.32	0.9	0.7
324	4/1/15	Paint	Administration Building	Lounge	Tackboard	Wood	B	Intact	Negative	0	0.02	0	0.02	0.4	0.5
325	4/1/15	Paint	Administration Building	Reception	Wall	Brick	A	Intact	Negative	0.2	0.05	0.2	0.05	0.6	0.4
326	4/1/15	Paint	Administration Building	Reception	Door	Metal	A	Intact	Null	0.29	0.13	0.29	0.13	-0.06	0.77
327	4/1/15	Paint	Administration Building	Reception	Door frame	Wood	A	Intact	Positive	1	0.3	0.6	0.1	1	0.3
328	4/1/15	Paint	Administration Building	Reception	Transom	Wood	A	Intact	Negative	0.5	0.1	0.5	0.1	0.6	0.5
329	4/1/15	Paint	Administration Building	Reception	Wall	Brick	D	Intact	Null	0.25	0.09	0.25	0.09	0.5	0.7
330	4/1/15	Paint	Administration Building	Reception	Wall	Brick	D	Intact	Negative	0.23	0.08	0.23	0.08	0.4	0.6
331	4/1/15	Paint	Administration Building	Reception	Baseboard	Wood	D	Intact	Negative	0.27	0.15	0.27	0.15	0.8	0.6
332	4/1/15	Paint	Administration Building	Reception	Door	Metal	D	Intact	Negative	0.03	0.56	0.4	0.1	0.03	0.56
333	4/1/15	Paint	Administration Building	Reception	Transom	Wood	D	Intact	Negative	0.6	0.1	0.6	0.1	0.8	0.3
334	4/1/15	Paint	Administration Building	Reception	Conduit	Metal	D	Intact	Negative	0.02	0.04	0.02	0.04	0.18	0.82
335	4/1/15	Paint	Administration Building	Health office	Wall	Brick	C	Intact	Negative	0.04	0.02	0.04	0.02	0.6	0.5
336	4/1/15	Paint	Administration Building	Health office	Door	Metal	C	Intact	Negative	0.08	0.07	0.08	0.07	-0.61	0.94

Little Lake City School District
Studebaker Elementary School

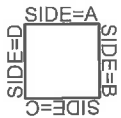
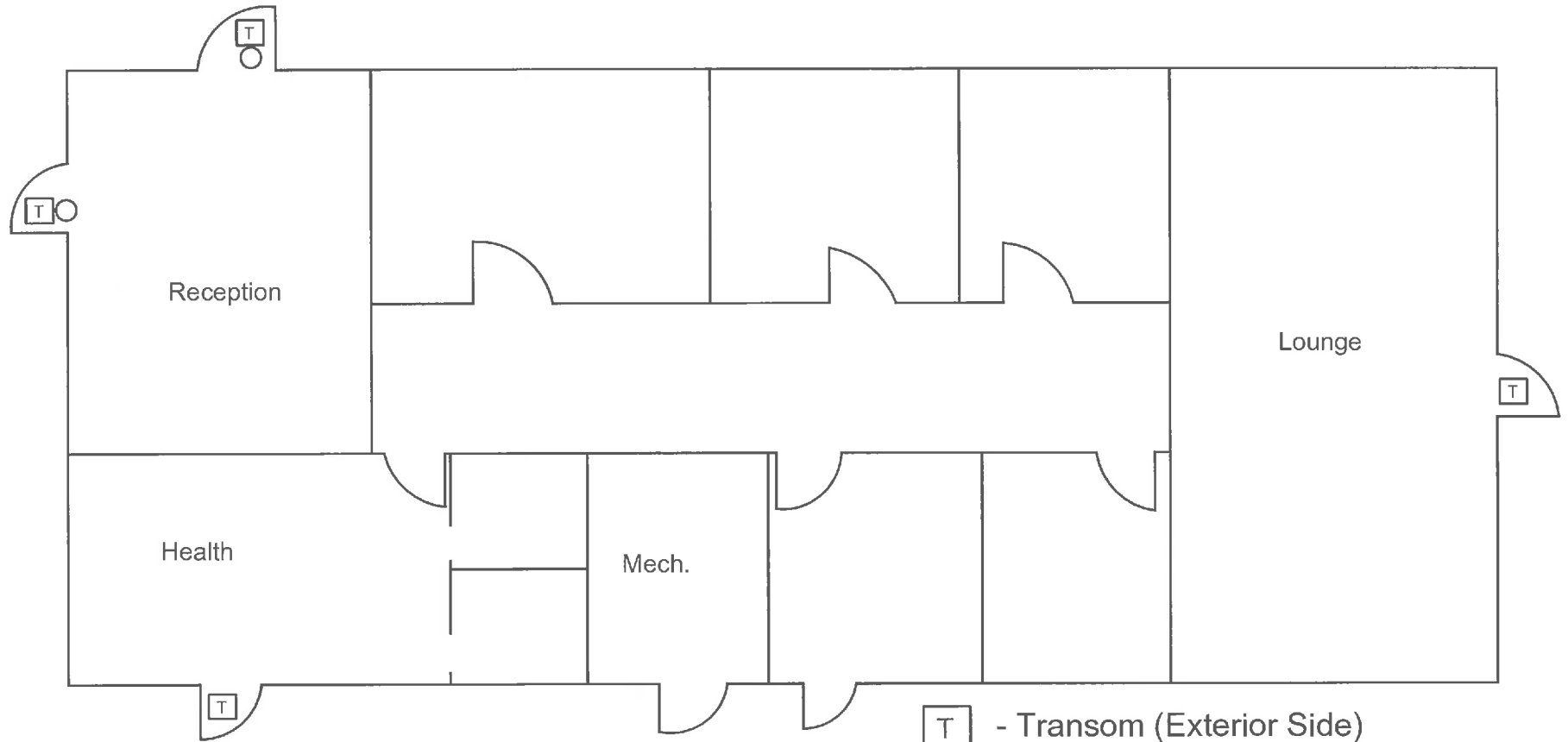
Reading No	Time	Type	Building	Location	Component	Substrate	Side	Condition	Results	PbC	PbC Error	PbL	PbL Error	PbK	PbK Error
337	4/1/15	Paint	Administration Building	Health office	Door frame	Wood	C	Intact	Negative	0.1	0.06	0.1	0.06	0.11	0.4
338	4/1/15	Paint	Administration Building	Health office	Transom	Wood	C	Intact	Negative	0.26	0.11	0.26	0.11	0.5	0.5
339	4/1/15	Paint	Administration Building	Health office	Baseboard	Wood	C	Intact	Negative	0.3	0.26	0.3	0.26	0.6	0.7
340	4/1/15	Paint	Administration Building	Mechanical room	Door	Metal	C	Intact	Negative	0.21	0.16	0.21	0.16	-0.58	1.56
341	4/1/15	Paint	Administration Building	Mechanical room	Door frame	Metal	C	Intact	Negative	0.24	0.14	0.24	0.14	0.22	1.06
342	4/1/15	Paint	Administration Building	Exterior	Wall	Brick	A	Intact	Negative	0.01	0.02	0.01	0.02	0.4	0.5
343	4/1/15	Paint	Administration Building	Exterior	Wall	Brick	B	Intact	Negative	0	0.02	0	0.02	0.5	0.6
344	4/1/15	Paint	Administration Building	Exterior	Wall	Brick	C	Intact	Negative	0	0.02	0	0.02	0.4	0.8
345	4/1/15	Paint	Administration Building	Exterior	Wall	Brick	D	Intact	Negative	0	0.02	0	0.02	0.6	0.5
346	4/1/15	Paint	Administration Building	Exterior	Door	Metal	A	Intact	Negative	-0.16	0.68	0.28	0.11	-0.16	0.68
347	4/1/15	Paint	Administration Building	Exterior	Door frame	Wood	A	Poor	Negative	0.24	0.19	0.24	0.19	0.6	0.6
348	4/1/15	Paint	Administration Building	Exterior	Transom	Wood	A	Intact	Positive	2	0.9	2	0.9	0.9	0.7
349	4/1/15	Paint	Administration Building	Exterior	Door	Metal	B	Intact	Negative	-0.19	0.55	0.25	0.08	-0.19	0.55
350	4/1/15	Paint	Administration Building	Exterior	Door frame	Wood	D	Intact	Negative	0.25	0.36	0.04	0.08	0.25	0.36

Little Lake City School District
Studebaker Elementary School

Reading No	Time	Type	Building	Location	Component	Substrate	Side	Condition	Results	PbC	PbC Error	PbL	PbL Error	PbK	PbK Error
351	4/1/15	Paint	Administration Building	Exterior	Door	Metal	C	Intact	Negative	-0.1	0.66	0.28	0.1	-0.1	0.66
352	4/1/15	Paint	Administration Building	Exterior	Door frame	Metal	C	Intact	Negative	0.3	0.11	0.3	0.11	0.22	0.74
353	4/1/15	Paint	Administration Building	Exterior	Door	Metal	C	Intact	Negative	-0.05	0.62	0.14	0.06	-0.05	0.62
354	4/1/15	Paint	Administration Building	Exterior	Door frame	Wood	C	Intact	Negative	0	0.02	0	0.02	0.15	0.49
355	4/1/15	Paint	Administration Building	Exterior	Door	Metal	D	Intact	Negative	-0.4	0.53	0.24	0.09	-0.4	0.53
356	4/1/15	Paint	Administration Building	Exterior	Door frame	Wood	D	Intact	Negative	0.13	0.06	0.13	0.06	0.4	0.4

APPENDIX B – SITE DRAWING

Administration Building



- T - Transom (Exterior Side)
- O - Door Frame (Interior Side)



Client: Little Lake City School District

Project #: 15-Z0187-0083

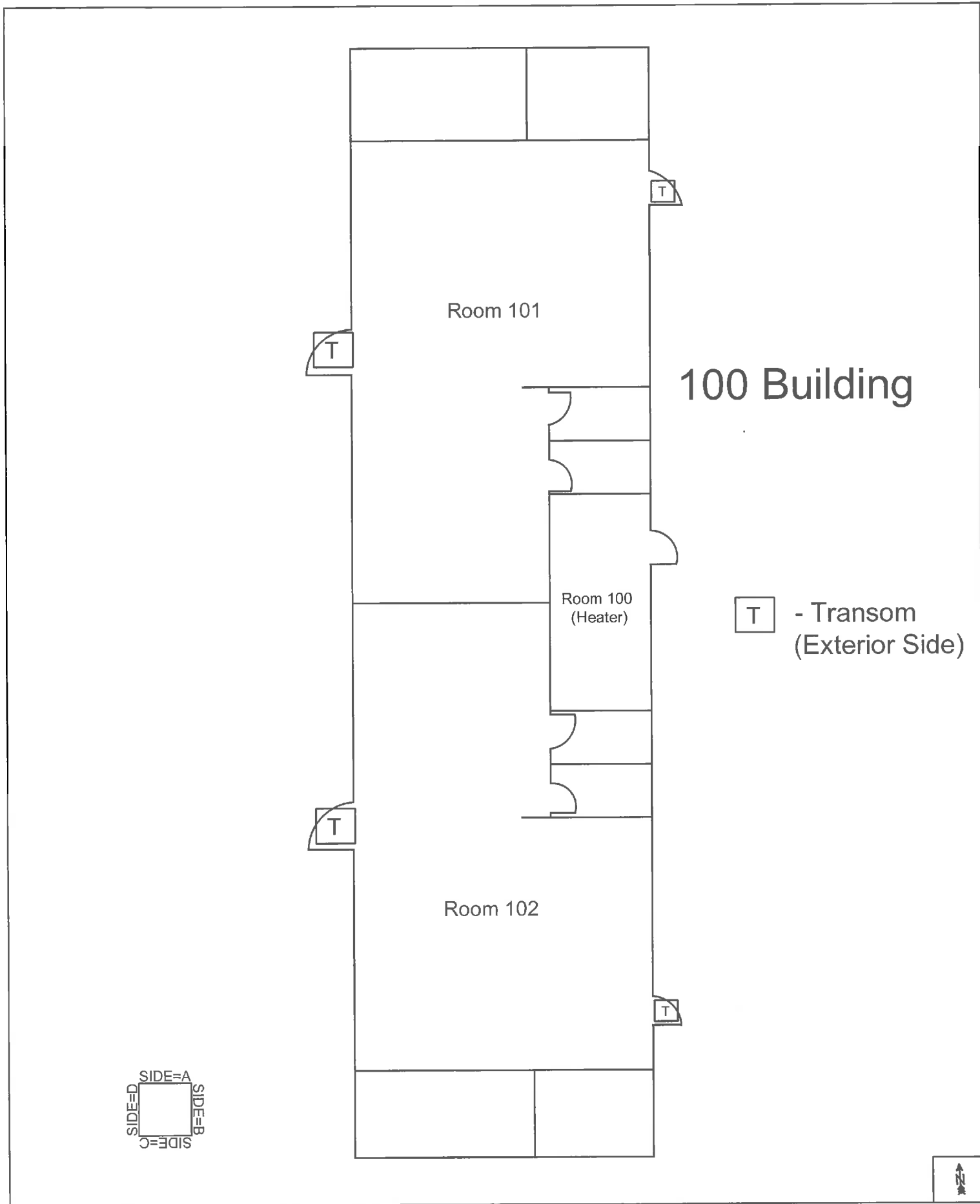
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EXECUTIVE ENVIRONMENTAL
HEALTH & SAFETY SIMPLIFIED

Site: Studebaker ES, Door Replacement Project
Address: 11800 Halcourt Avenue
Norwalk, California 90650

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Client: Little Lake City School District

Project#: 15-Z0187-0083

Info: Lead-Based Paint/Glaze Identified

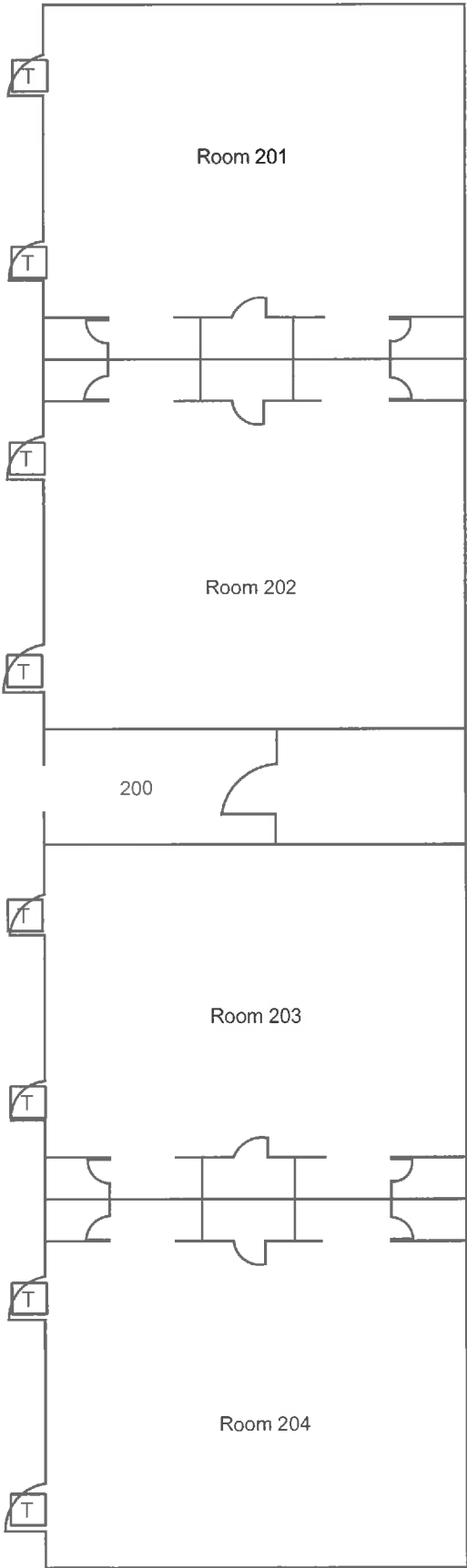


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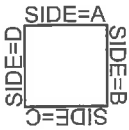
Site: Studebaker ES, Door Replacement Project
Address: 11800 Halcourt Avenue
Norwalk, California 90650

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200 Building



T - Transom
(Exterior Side)



Client: Little Lake City School District

Project#: 15-Z0187-0083

Info: Lead-Based Paint/Glaze Identified



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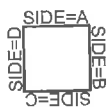
Site: Studebaker ES, Door Replacement Project
Address: 11800 Halcourt Avenue
Norwalk, California 90650

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300 Building

T - Transom
(Exterior Side)



Client: Little Lake City School District

Project#: 15-Z0187-0083

Info: Lead-Based Paint/Glaze Identified



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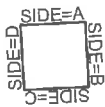
Site: Studebaker ES, Door Replacement Project
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Norwalk, California 90650

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400 Building



 - Transom
(Exterior Side)



Client: Little Lake City School District

Project#: 15-Z0187-0083

Info: Lead-Based Paint/Glaze Identified

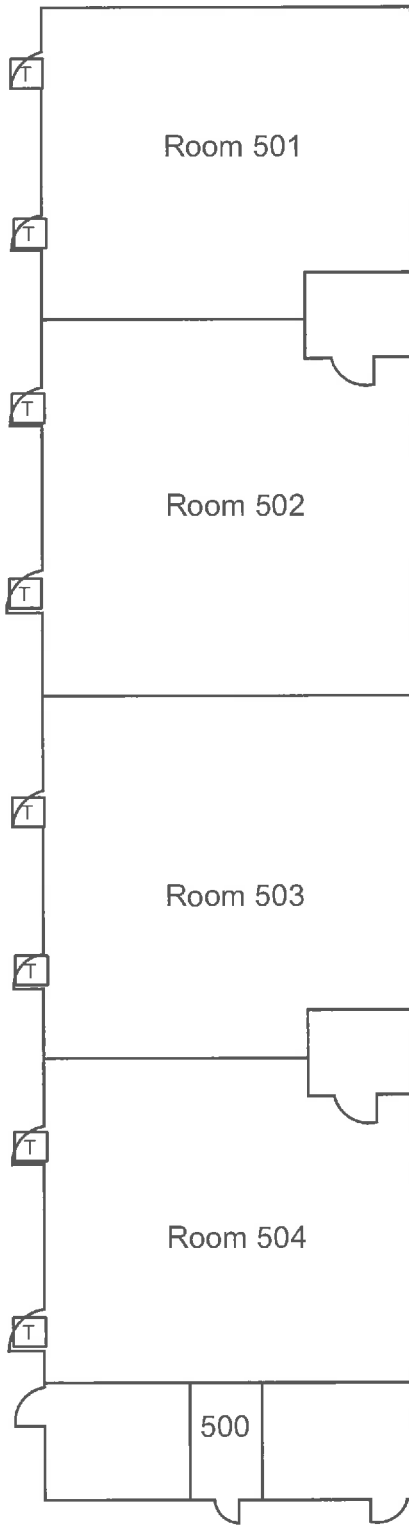


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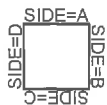
Site: Studebaker ES, Door Replacement Project
Address: 11800 Halcourt Avenue
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500 Building



 - Transom
(Exterior Side)



Client: Little Lake City School District

Project#: 15-Z0187-0083

Info: Lead-Based Paint/Glaze Identified

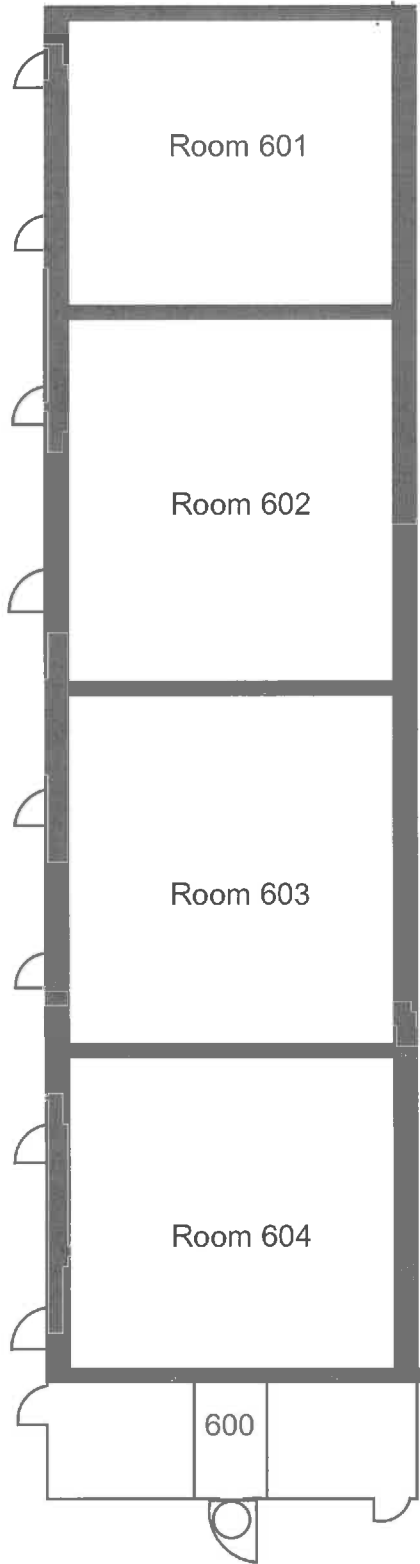


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HEALTH & SAFETY SIMPLIFIED

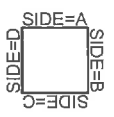
Site: Studebaker ES, Door Replacement Project
Address: 11800 Halcourt Avenue
Norwalk, California 90650

Drawing Not to Scale - © 2012

600 Building



- - Door Frame (Interior Side)
- - Wood Baseboard



Client: Little Lake City School District **Project#:** 15-Z0187-0083 **Info:** Lead-Based Paint/Glaze Identified



EXECUTIVE ENVIRONMENTAL
HEALTH & SAFETY SIMPLIFIED

Site: Studebaker ES, Door Replacement Project
Address: 11800 Halcourt Avenue
Norwalk, California 90650

Drawing Not to Scale - © 2012

APPENDIX C – LEAD HAZARD EVALUATION REPORT

LEAD HAZARD EVALUATION REPORT

Section 1 – Date of Lead Hazard Evaluation 3/31/15 to 4/01/15

Section 2 – Type of Lead Hazard Evaluation (Check one box only)

Lead Inspection Risk assessment Clearance Inspection Other (specify) _____

Section 3 – Structure Where Lead Hazard Evaluation Was Conducted

Address [number, street, apartment (if applicable)] <u>11800 HALCOURT AVE.</u>		City <u>NORWALK</u>	County <u>LOS ANGELES</u>	Zip Code <u>90650</u>
Construction date (year) of structure <u>UNKNOWN</u>	Type of structure <input type="checkbox"/> Multi-unit building <input checked="" type="checkbox"/> School or daycare <input type="checkbox"/> Single family dwelling <input type="checkbox"/> Other _____		Children living in structure? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Don't Know	


Section 4 – Owner of Structure (if business/agency, list contact person)

Name <u>LITTLE LAKE CSD (FRAN DIAZ)</u>		Telephone number <u>(562) 868-8241</u>		
Address [number, street, apartment (if applicable)] <u>10515 S. PIONEER BLVD.</u>		City <u>SANTA FE SPRINGS</u>	State <u>CA</u>	Zip Code <u>90670</u>

Section 5 – Results of Lead Hazard Evaluation (check all that apply)

No lead-based paint detected Intact lead-based paint detected Deteriorated lead-based paint detected
 No lead hazards detected Lead-contaminated dust found Lead-contaminated soil found Other _____

Section 6 – Individual Conducting Lead Hazard Evaluation

Name <u>George Valverde</u>		Telephone number <u>(626) 441-7050</u>		
Address [number, street, apartment (if applicable)] <u>310 E. Foothill Boulevard Suite 200</u>		City <u>Arcadia</u>	State <u>CA</u>	Zip Code <u>91006</u>
CDPH certification number <u>24605</u>	Signature 		Date <u>4/01/15</u>	

Name and CDPH certification number of any other individuals conducting sampling or testing (if applicable)

Section 7 – Attachments

- A. A foundation diagram or sketch of the structure indicating the specific locations of each lead hazard or presence of lead-based paint;
- B. Each testing method, device, and sampling procedure used;
- C. All data collected, including quality control data, laboratory results, including laboratory name, address, and phone number.

First copy and attachments retained by inspector
Second copy and attachments retained by owner

Third copy only (no attachments) mailed or faxed to:
California Department of Public Health
Childhood Lead Poisoning Prevention Branch Reports
850 Marina Bay Parkway, Building P, Third Floor
Richmond, CA 94804-6403
Fax: (510) 620-5656

APPENDIX D – XRF PERFORMANCE CHARACTERISTICS SHEET

Performance Characteristic Sheet

EFFECTIVE DATE: September 24, 2004

EDITION NO.: 1

MANUFACTURER AND MODEL:

Make: *Niton LLC*

Tested Model: *XLP 300*

Source: ^{109}Cd

Note: This PCS is also applicable to the equivalent model variations indicated below, for the Lead-in-Paint K+L variable reading time mode, in the XLI and XLP series:

XLI 300A, XLI 301A, XLI 302A, and XLI 303A.

XLP 300A, XLP 301A, XLP 302A, and XLP 303A.

XLI 700A, XLI 701A, XLI 702A, and XLI 703A.

XLP 700A, XLP 701A, XLP 702A, and XLP 703A.

Note: The XLI and XLP versions refer to the shape of the handle part of the instrument. The differences in the model numbers reflect other modes available, in addition to Lead-in-Paint modes. The manufacturer states that specifications for these instruments are identical for the source, detector, and detector electronics relative to the Lead-in-Paint mode.

FIELD OPERATION GUIDANCE

OPERATING PARAMETERS:

Lead-in-Paint K+L variable reading time mode.

XRF CALIBRATION CHECK LIMITS:

0.8 to 1.2 mg/cm² (inclusive)

The calibration of the XRF instrument should be checked using the paint film nearest 1.0 mg/cm² in the NIST Standard Reference Material (SRM) used (e.g., for NIST SRM 2579, use the 1.02 mg/cm² film).

If readings are outside the acceptable calibration check range, follow the manufacturer's instructions to bring the instruments into control before XRF testing proceeds.

SUBSTRATE CORRECTION:

For XRF results using Lead-in-Paint K+L variable reading time mode, substrate correction is not needed for:

Brick, Concrete, Drywall, Metal, Plaster, and Wood

INCONCLUSIVE RANGE OR THRESHOLD:

K+L MODE READING DESCRIPTION	SUBSTRATE	THRESHOLD (mg/cm ²)
Results not corrected for substrate bias on any substrate	Brick	1.0
	Concrete	1.0
	Drywall	1.0
	Metal	1.0
	Plaster	1.0
	Wood	1.0

BACKGROUND INFORMATION

EVALUATION DATA SOURCE AND DATE:

This sheet is supplemental information to be used in conjunction with Chapter 7 of the HUD *Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing* ("HUD Guidelines"). Performance parameters shown on this sheet are calculated from the EPA/HUD evaluation using archived building components. Testing was conducted in August 2004 on 133 testing combinations. The instruments that were used to perform the testing had new sources; one instrument's was installed in November 2003 with 40 mCi initial strength, and the other's was installed June 2004 with 40 mCi initial strength.

OPERATING PARAMETERS:

Performance parameters shown in this sheet are applicable only when properly operating the instrument using the manufacturer's instructions and procedures described in Chapter 7 of the HUD Guidelines.

SUBSTRATE CORRECTION VALUE COMPUTATION:

Substrate correction is not needed for brick, concrete, drywall, metal, plaster or wood when using Lead-in-Paint K+L variable reading time mode, the normal operating mode for these instruments. If substrate correction is desired, refer to Chapter 7 of the HUD Guidelines for guidance on correcting XRF results for substrate bias.

EVALUATING THE QUALITY OF XRF TESTING:

Randomly select ten testing combinations for retesting from each house or from two randomly selected units in multifamily housing. Use the K+L variable time mode readings.

Conduct XRF retesting at the ten testing combinations selected for retesting.

Determine if the XRF testing in the units or house passed or failed the test by applying the steps below.

Compute the Retest Tolerance Limit by the following steps:

Determine XRF results for the original and retest XRF readings. Do not correct the original or retest results for substrate bias. In single-family housing a result is defined as the average of three readings. In multifamily housing, a result is a single reading. Therefore, there will be ten original and ten retest XRF results for each house or for the two selected units.

Calculate the average of the original XRF result and retest XRF result for each testing combination.

Square the average for each testing combination.

Add the ten squared averages together. Call this quantity C.

Multiply the number C by 0.0072. Call this quantity D.

Add the number 0.032 to D. Call this quantity E.

Take the square root of E. Call this quantity F.

Multiply F by 1.645. The result is the Retest Tolerance Limit.

Compute the average of all ten original XRF results.

Compute the average of all ten re-test XRF results.

Find the absolute difference of the two averages.

If the difference is less than the Retest Tolerance Limit, the inspection has passed the retest. If the difference of the overall averages equals or exceeds the Retest Tolerance Limit, this procedure should be repeated with ten new testing combinations. If the difference of the overall averages is equal to greater than the Retest Tolerance Limit a second time, then the inspection should be consider deficient.

Use of this procedure is estimated to produce a spurious result approximately 1% of the time. That is, results of this procedure will call for further examination when no examination is warranted in approximately 1 out of 100 dwelling units tested.

TESTING TIMES:

For the Lead-in-Paint K+L variable reading time mode, the instrument continues to read until it is moved away from the testing surface, terminated by the user, or the instrument software indicates the reading is complete. The following table provides testing time information for this testing mode. The times have been adjusted for source decay, normalized to the initial source strengths as noted above. Source strength and type of substrate will affect actual testing times. At the time of testing, the instruments had source strengths of 26.6 and 36.6 mCi.

Testing Times Using K+L Reading Mode (Seconds)						
Substrate	All Data			Median for laboratory-measured lead levels (mg/cm ²)		
	25 th Percentile	Median	75 th Percentile	Pb < 0.25	0.25 ≤ Pb < 1.0	1.0 ≤ Pb
Wood Drywall	4	11	19	11	15	11
Metal	4	12	18	9	12	14
Brick Concrete Plaster	8	16	22	15	18	16

CLASSIFICATION RESULTS:

XRF results are classified as positive if they are greater than or equal to the threshold, and negative if they are less than the threshold.

DOCUMENTATION:

A document titled *Methodology for XRF Performance Characteristic Sheets* provides an explanation of the statistical methodology used to construct the data in the sheets, and provides empirical results from using the recommended inconclusive ranges of thresholds for specific XRF instruments. For a copy of this document call the National Lead Information Center Clearinghouse at 1-800-424-LEAD.

This XRF Performance Characteristic Sheet was developed by the Midwest research Institute (MRI) and QuanTech, Inc., under a contract between MRI and the XRF manufacturer. HUD has determined that the information provided here is acceptable when used as guidance in conjunction with Chapter 7, Lead-Based Paint Inspection, of HUD's *Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing*.