



PROJECT MANUAL

**PROJECT/CONTRACT NUMBER:
0921-8221; 8150-5830-4**

Lakewood Elementary School Roofing

Reroofing of Buildings

LODI UNIFIED SCHOOL DISTRICT

April 7, 2023

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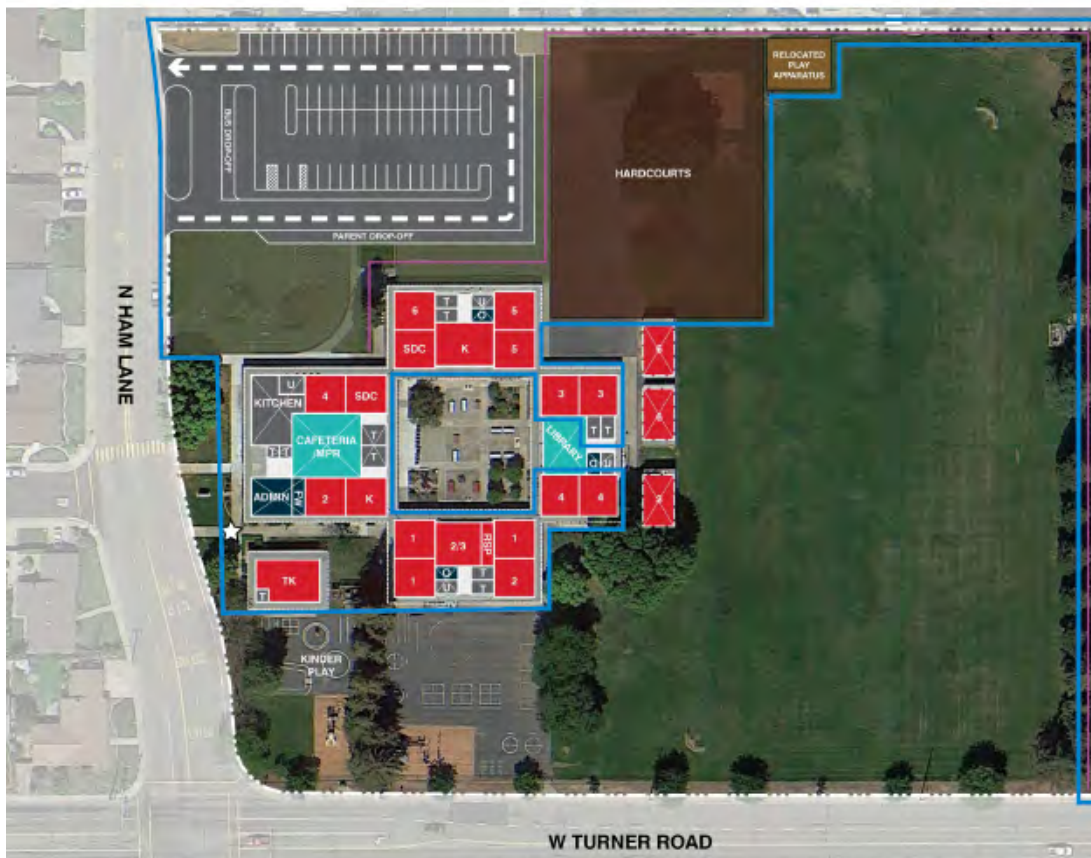
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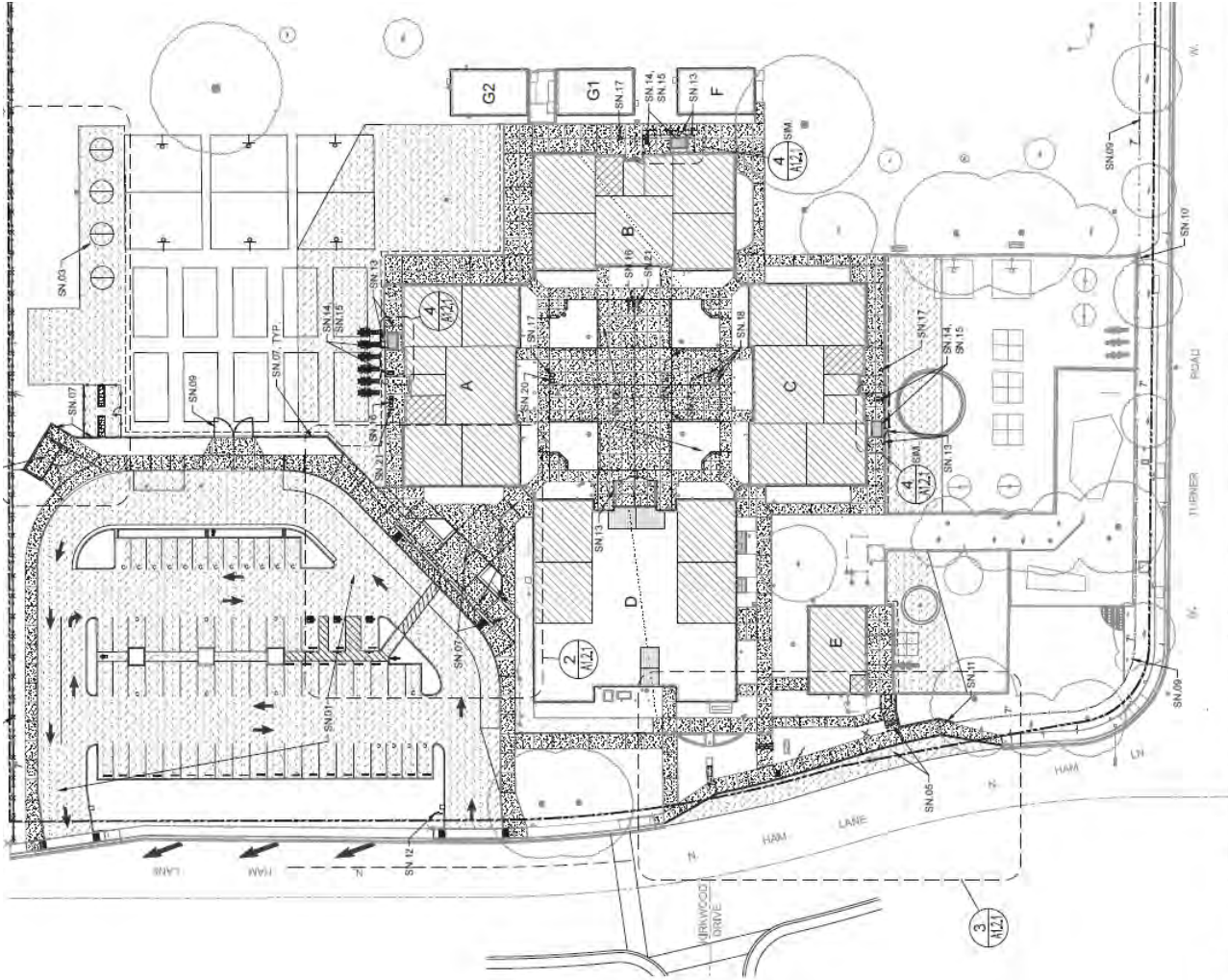
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1 SITE PLAN
A1.1.2 SCALE: 1" = 40.0'



LIST OF SCHEDULES

The District may change the dates on this schedule without prior notice.

April 7 and April 14, 2023	Advertisement of Project
April 18, 2023 (2:30 PM)	Mandatory Pre-Bid Walk
April 24, 2023 (4:00PM)	Last Day to Receive Written Questions from Respondents
April 27, 2023	Last Day for District to Issue Addenda
May 2, 2023 (1:00PM)	Final Proposals Due
May 9, 2023	Board of Education Approval
May 16, 2023	Anticipated Date of Contract Execution and issue NTP
June 5, 2023	Start of Project
July 27, 2023	Project Completion

END OF DOCUMENT

NOTICE TO BIDDERS

1. Notice is hereby given that the board of Education ("Board") of the Lodi Unified School District ("District") will receive sealed bids for the following project, Bid No. 0921-8221; 8150-5830-4, Project: Lakewood Elementary School Roofing.
2. The Project consists of:
Remove and replace the Roof at Lakewood Elementary School
1100 N. Ham Lane. Lodi CA 95242
REMOVE AND REPLACE APPROX 45,000 SQ FEET OF ROOFING for the Lodi Unified School District, included, but not limited to the following;
 - Power wash the existing Cap sheet roofing Clean off all debris and any loose roofing.
 - Cut out all the existing Blisters.
 - Remove all existing roofing shingles, underlayment, designated sheet metal flashings, cupola, gutters and portions of the existing downspouts as directed by School District.
 - Remove abandoned roof mounted equipment as directed by School District.
 - Repair, fill in roof decking where abandoned equipment and cupola is removed.
 - Remove and replace existing deteriorated wood roof decking, fascia and trim where designated by School District to match existing.
 - Remove stucco as necessary to install new flashing where there is currently none and the existing shingle roof abuts the stucco directly.
 - Fill in the existing integral gutters with appropriate size blocking and install new plywood over this blocking.
 - Supply and install U87 Polyurea Hybrid Base coat to the existing Roof.
 - Supply and Install Polyurea Aliphatic topcoat per manufacture specs Color to be white.
 - Supply and install new perimeter edge metal.
 - Supply and Install new walk pads from the roof hatches to the HVAC units.
 - ADD ALTERNATE:
 - Supply and new gutter guards
3. To bid on this Project, the Bidder is required to possess one or more of the following State of California Contractor Licenses:
B, C – 39 and C - 43
The Bidder's license(s) must remain active and in good standing throughout the term of the Contract.
4. To bid on this Project, the Bidder is required to be registered as a public works contractor with the Department of Industrial Relations pursuant to the Labor Code. The Bidder's registration must remain active throughout the term of the Contract.
5. Contract Documents are available on **April 7, 2023**, for review on the district's website or at the District Facilities Office.
6. Sealed Bids must be received by **1:00 p.m., May 2, 2023**, at the District Facilities & Planning Office, 1305 E. Vine Street, Lodi, California, at or after which time the bids will be opened and publicly read aloud. Any bid that is submitted after

this time shall be non-responsive and returned to the bidder. Any claim by a bidder of error in its bid must be made in compliance with section 5100 et seq. of the Public Contract Code.

7. Pursuant to Public Contract Code section 20111.6, only prequalified bidders will be eligible to submit a bid for this Project. Any bid submitted by a bidder who is not prequalified shall be non-responsive and returned unopened to the bidder. Moreover, any bid listing 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, if used, who have not been prequalified, shall be deemed nonresponsive and will not be considered.
8. All bids shall be on the form provided by the District. Each bid must conform and be responsive to all pertinent Contract Documents, including, but not limited to, the Instructions to Bidders.
9. A bid bond by an admitted surety insurer on the form provided by the District, cash, or a cashier's check or a certified check, drawn to the order of the Lodi Unified School District, in the amount of ten percent (10%) of the total bid price, shall accompany the Bid Form and Proposal, as a guarantee that the Bidder will, within seven (7) calendar days after the date of the Notice of Award, enter into a contract with the District for the performance of the services as stipulated in the bid.
10. A mandatory pre-bid conference and site visit will be held on **April 18, 2023, at 10:30 a.m. at 1100 N Ham Lane, Lodi, California.** All participants are required to sign in. The Site Visit is expected to take approximately one hour. Failure to attend or tardiness will render bid ineligible.
11. The successful Bidder shall be required to furnish a 100% Performance Bond and a 100% Payment Bond if it is awarded the contract for the Work.
12. The successful Bidder may substitute securities for any monies withheld by the District to ensure performance under the Contract, in accordance with the provisions of section 22300 of the Public Contract Code.
13. 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 sections 1770 et seq. of the California Labor Code. Prevailing wage rates are also available from the District or on the Internet at: <<http://www.dir.ca.gov>>.
14. This Project is subject to labor compliance monitoring and enforcement by the Department of Industrial Relations pursuant to Labor Code section 1771.4 and subject to the requirements of Title 8 of the California Code of Regulations. The Contractor and all Subcontractors under the Contractor shall furnish electronic certified payroll records directly to the Labor Commissioner weekly or within ten (10) days of any request by the District or the Labor Commissioner. The successful Bidder shall comply with all requirements of Division 2, Part 7, Chapter 1, Articles 1-5 of the Labor Code.

15. The District shall award the Contract, if it awards it at all, to the lowest responsive responsible bidder.
16. The Board reserves the right to reject any and all bids and/or waive any irregularity in any bid received. If the District awards the Contract, the security of unsuccessful bidder(s) shall be returned within sixty (60) days from the time the award is made. Unless otherwise required by law, no bidder may withdraw its bid for ninety (90) days after the date of the bid opening.

END OF DOCUMENT

INSTRUCTIONS TO BIDDERS

Contractors shall follow the instructions in this document, and shall submit all documents, forms, and information required for consideration of a Bid.

Lodi Unified School District ("District") will evaluate information submitted by the apparent low Bidder and, if incomplete or unsatisfactory to District, Bidder's bid may be rejected at the sole discretion of District.

1. Bids are requested for a general construction contract, or work described in general, for the following project ("Project" or "Contract"):
Lakewood Elementary School Roofing Project No. 0921-8221; 8150-5830-4
2. District will receive sealed Bids from Bidders as stipulated in the Notice to Bidders.
3. The District has prequalified bidders pursuant to Public Contract Code Section 20111.6. Only prequalified bidders will be eligible to submit a bid for this Project. Any bid submitted by a bidder who is not prequalified shall be deemed nonresponsive and will not be considered. Moreover, any bid listing 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, if used, who have not been prequalified, shall be deemed nonresponsive and will not be considered.
4. Bidders must submit Bids on the Bid Form and Proposal and all other required District forms. Bids not submitted on the District's required forms shall be deemed non-responsive and shall not be considered. Additional sheets required to fully respond to requested information are permissible.
5. Bidders must supply all information required by each Bid Document. Bids must be full and complete. District reserves the right in its sole discretion to reject any Bid as non-responsive as a result of any error or omission in the Bid. Bidders must complete and submit all of the following documents with the Bid Form and Proposal:
 - a. Bid Bond on the District's form, or other security.
 - b. Designated Subcontractors List.
 - c. Noncollusion Declaration.
 - d. Iran Contracting Act Certification, if contract value is \$1,000,000 or more.
6. Bidders must submit with their Bids cash, a cashier's check or a certified check payable to District, or a bid bond by an admitted surety insurer of not less than ten percent (10%) of amount of base Bid, plus all additive alternates ("Bid Bond"). If Bidder chooses to provide a Bid Bond as security, Bidder must use the required form of corporate surety provided by District. The Surety on Bidder's Bid Bond must be an insurer admitted in the State of California and authorized to issue surety bonds in the State of California. Bids submitted without necessary bid security will be deemed non-responsive and will not be considered.

7. If Bidder to whom Contract is awarded fails or neglects to enter into Contract and submit required bonds, insurance certificates, and all other required documents, within **SEVEN (7)** calendar days after the date of the Notice of Award, District may deposit Bid Bond, cash, cashier's check, or certified check for collection, and proceeds thereof may be retained by District as liquidated damages for failure of Bidder to enter into Contract, in the sole discretion of District. It is agreed that calculation of damages District may suffer as a result of Bidder's failure to enter into the Contract would be extremely difficult and impractical to determine and that the amount of the Bidder's required bid security shall be the agreed and conclusively presumed amount of damages.
8. Bidders must submit with the Bid the Designated Subcontractors List for those subcontractors who will perform any portion of Work, including labor, rendering of service, or specially fabricating and installing a portion of the Work or improvement according to detailed drawings contained in the plans and specifications, in excess of one half of one percent (0.5%) of total Bid. All of the listed subcontractors are required to be registered as a public works contractor with the Department of Industrial Relations pursuant to the Labor Code.
9. The subcontractor's registration must remain active throughout the term of the Contract. Failure to submit this list when required by law shall result in Bid being deemed non-responsive and the Bid will not be considered.
 - a. An inadvertent error in listing the California contractor license number on the Designated Subcontractors List shall not be grounds for filing a bid protest or grounds for considering the bid nonresponsive if the correct contractor's license number is submitted to the District within 24 hours after the bid opening and the corrected number corresponds with the submitted name and location for that subcontractor.
 - b. An inadvertent error listing an unregistered subcontractor shall not be grounds for filing a bid protest or grounds for considering the bid nonresponsive provided that any of the following apply:
 - (1) The subcontractor is registered prior to the bid opening.
 - (2) The subcontractor is registered and has paid the penalty registration fee within 24 hours after the bid opening.
 - (3) The subcontractor is replaced by another registered subcontractor pursuant to Public Contract Code section 4107.
10. If a mandatory pre-bid conference and site visit ("Site Visit") is required as referenced in the Notice to Bidders, the Bidders must sign the "Mandatory Contractor's Conference" sign-in sheet at the conference and site visit. District will transmit to all prospective Bidders of record such Addenda as District in its discretion considers necessary in response to questions arising at the Site Visit. Oral statements shall not be relied upon and will not be binding or legally effective. Addenda issued by the District as a result of the Site Visit, if any, shall constitute the sole and exclusive record and statement of the results of the Site Visit.

11. Bidders shall submit the Non-Collusion Declaration with their Bids. Bids submitted without the Non-Collusion Declaration shall be deemed non-responsive and will not be considered.
12. Bids shall be clearly written and without erasure or deletions. District reserves the right to reject any Bid containing erasures, deletions, or illegible contents.
13. Bidders shall not modify the Bid Form and Proposal or qualify their Bids. Bidders shall not submit to the District a re-formatted, re-typed, altered, modified, or otherwise recreated version of the Bid Form and Proposal or other District-provided document.
14. The Bidder 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 sections 1770 et seq. of the California Labor Code. Copies of the general prevailing rates of per diem wages for each craft, classification, or type of worker needed to execute the Contract, as determined by Director of the State of California Department of Industrial Relations, are available upon request at the District's principal office. Prevailing wage rates are also available on the internet at <http://www.dir.ca.gov>.
15. Submission of Bid signifies careful examination of Contract Documents and complete understanding of the nature, extent, and location of Work to be performed. Bidders must complete the tasks listed below as a condition to bidding, and submission of a Bid shall constitute the Bidder's express representation to District that Bidder has fully completed the following:
 - a. Bidder has visited the Site, if required, and has examined thoroughly and understood the nature and extent of the Contract Documents, Work, Site, locality, actual conditions, as-built conditions, and all local conditions and federal, state and local laws, and regulations that in any manner may affect cost, progress, performance, or furnishing of Work or that relate to any aspect of the means, methods, techniques, sequences, or procedures of construction to be employed by Bidder and safety precautions and programs incident thereto;
 - b. Bidder has conducted or obtained and has understood all examinations, investigations, explorations, tests, reports, and studies that pertain to the subsurface conditions, as-built conditions, underground facilities, and all other physical conditions at or contiguous to the Site or otherwise that may affect the cost, progress, performance, or furnishing of Work, as Bidder considers necessary for the performance or furnishing of Work at the Contract Sum, within the Contract Time, and in accordance with the other terms and conditions of Contract Documents, including specifically the provisions of the General Conditions; and no additional examinations, investigations, explorations, tests, reports, studies, or similar information or data are or will be required by Bidder for such purposes;

- c. Bidder has correlated its knowledge and the results of all such observations, examinations, investigations, explorations, tests, reports, and studies with the terms and conditions of the Contract Documents;
- d. Bidder has given the District prompt written notice of all conflicts, errors, ambiguities, or discrepancies that it has discovered in or among the Contract Documents and the actual conditions, and the written resolution thereof by the District is acceptable to Bidder;
- e. Bidder has made a complete disclosure in writing to the District of all facts bearing upon any possible interest, direct or indirect, that Bidder believes any representative of the District or other officer or employee of the District presently has or will have in this Contract or in the performance thereof or in any portion of the profits thereof;
- f. Bidder must, prior to bidding, perform the work, investigations, research, and analysis required by this document and that Bidder represented in its Bid Form and Proposal and the Agreement that it performed prior to bidding. Contractor under this Contract is charged with all information and knowledge that a reasonable bidder would ascertain from having performed this required work, investigation, research, and analysis. Bid prices must include entire cost of all work "incidental" to completion of the Work.
- g. Conditions Shown on the Contract Documents: Information as to underground conditions, as-built conditions, or other conditions or obstructions, indicated in the Contract Documents, e.g., on Drawings or in Specifications, has been obtained with reasonable care, and has been recorded in good faith. However, District only warrants, and Contractor may only rely, on the accuracy of limited types of information.
 - (1) As to above-ground conditions or as-built conditions shown or indicated in the Contract Documents, there is no warranty, express or implied, or any representation express or implied, that such information is correctly shown or indicated. This information is verifiable by independent investigation and Contractor is required to make such verification as a condition to bidding. In submitting its Bid, Contractor shall rely on the results of its own independent investigation. In submitting its Bid, Contractor shall not rely on District-supplied information regarding above-ground conditions or as-built conditions.
 - (2) As to any subsurface condition shown or indicated in the Contract Documents, Contractor may rely only upon the general accuracy of actual reported depths, actual reported character of materials, actual reported soil types, actual reported water conditions, or actual obstructions shown or indicated. District is not responsible for the completeness of such information for bidding or construction; nor is District responsible in any way for any conclusions or opinions that the Contractor has drawn from such information; nor is the District responsible for subsurface conditions that are not specifically shown (for example, District is not responsible for soil conditions in areas contiguous to areas where a subsurface condition is shown).

- h. Conditions Shown in Reports and Drawings Supplied for Informational Purposes: Reference is made to the document entitled Geotechnical Data, and the document entitled Existing Conditions, for identification of:
- (1) Subsurface Conditions: Those reports of explorations and tests of subsurface conditions at or contiguous to the Site that have been utilized by Architect in preparing the Contract Documents; and
 - (2) Physical Conditions: Those drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the Site that has been utilized by Architect in preparing the Contract Documents.
 - (3) These reports and drawings are **not** Contract Documents and, except for any "technical" data regarding subsurface conditions specifically identified in Geotechnical Data and Existing Conditions, and underground facilities data, Contractor may not in any manner rely on the information in these reports and drawings. Subject to the foregoing, Contractor must make its own independent investigation of all conditions affecting the Work and must not rely on information provided by District.
16. Bidders may examine any available "as-built" drawings of previous work by giving District reasonable advance notice. District will not be responsible for accuracy of "as-built" drawings. The document entitled Existing Conditions applies to all supplied "as-built" drawings.
17. All questions about the meaning or intent of the Contract Documents are to be directed in writing to the District. Interpretations or clarifications considered necessary by the District in response to such questions will be issued in writing by Addenda emailed, faxed, mailed, or delivered to all parties recorded by the District as having received the Contract Documents. Questions received less than **SEVEN (7)** calendar days prior to the date for opening Bids may not be answered. Only questions answered by formal written Addenda will be binding. Oral and other interpretations or clarifications will be without legal effect.
18. Addenda may also be issued to modify other parts of the Contract Documents as deemed advisable by the District.
19. Each Bidder must acknowledge each Addendum in its Bid Form and Proposal by number or its Bid shall be considered non-responsive. Each Addendum shall be part of the Contract Documents. A complete listing of Addenda may be secured from the District.
20. Bids shall be based on products and systems specified in Contract Documents or listed by name in Addenda. Whenever in the Specifications any materials, process, or article is indicated or specified by grade, patent, or proprietary name, or by name of manufacturer, that Specification shall be deemed to be followed by the words "or equal." Bidder may, unless otherwise stated, offer any material, process, or article that shall be substantially equal or better in every respect to that so indicated or specified. The District is not responsible and/or liable in any way for a Contractor's damages and/or claims related, in any way, to that Contractor's basing its bid on any requested substitution that the District has not approved in advance and in writing.

Contractors and materials suppliers who submit requests for substitutions prior to the award of the Contract must do so in writing and in compliance with Public Contract Code section 3400. All requests must comply with the following:

- a. District must receive any notice of request for substitution of a specified item a minimum of **TEN (10)** calendar days prior to bid opening. The Successful Bidder will not be allowed to substitute specified items unless properly noticed.
 - b. Within 35 days after the date of the Notice of Award, the Successful Bidder shall submit data substantiating a request(s) for all substitution(s) containing sufficient information to assess acceptability of product or system and impact on Project, including, without limitation, the requirements specified in the Special Conditions and the Specifications. Insufficient information shall be grounds for rejection of substitution.
 - c. Approved substitutions, if any, shall be listed in Addenda. District reserves the right not to act upon submittals of substitutions until after bid opening.
 - d. Substitutions may be requested after Contract has been awarded only if indicated in and in accordance with requirements specified in the Special Conditions and the Specifications.
21. All Bids must be sealed, and marked with name and address of the Bidder and the Project Number, Bid number, Bid package, and time of bid opening. Bids will be received as indicated in the Notice to Bidders.
- a. Mark envelopes with the name of the Project.
 - b. Bids must be submitted to the **District Facilities & Planning Office** by date and time shown in the Notice to Bidders.
 - c. Bids must contain all documents as required herein.
22. Bids will be opened at or after the time indicated for receipt of bids.
23. This Contract may include alternates. Alternates are defined as alternate products, materials, equipment, systems, methods, or major elements of the construction that may, at the District's option and under terms established in the Contract and pursuant to section 20103.8 of the Public Contract Code, be selected for the Work.
24. The District shall award the Contract, if it awards it at all, to the lowest responsive responsible bidder based on the criteria as indicated in the Notice to Bidders. In the event two or more responsible bidders submit identical bids, the District shall select the Bidder to whom to award the Contract by lot.
25. Time for Completion: District may issue a Notice to Proceed within **NINETY (90) days** from the date of the Notice of Award. Once Contractor has received the Notice to Proceed, Contractor shall complete the Work within the period of time indicated in the Contract Documents.
- a. In the event that the District desires to postpone issuing the Notice to Proceed beyond this 90-day period, it is expressly understood that with

reasonable notice to the Contractor, the District may postpone issuing the Notice to Proceed.

- b. It is further expressly understood by Contractor that Contractor shall not be entitled to any claim of additional compensation as a result of the postponement of the issuance of the Notice to Proceed beyond a 90-day period. If the Contractor believes that a postponement of issuance of the Notice to Proceed will cause a hardship to the Contractor, the Contractor may terminate the Contract. Contractor's termination due to a postponement beyond this 90-day period shall be by written notice to District within **TEN (10)** calendar days after receipt by Contractor of District's notice of postponement.
 - c. It is further understood by the Contractor that in the event that Contractor terminates the Contract as a result of postponement by the District, the District shall only be obligated to pay Contractor for the Work that Contractor had performed at the time of notification of postponement and which the District had in writing authorized Contractor to perform prior to issuing a Notice to Proceed.
 - d. Should the Contractor terminate the Contract as a result of a notice of postponement, District shall have the authority to award the Contract to the next lowest responsive responsible bidder.
26. The Bidder to whom Contract is awarded shall execute and submit the following documents by 4:00 p.m. of the **FIFTH (5th)** calendar day following the date of the Notice of Award. Failure to properly and timely submit these documents entitles District to reject the bid as non-responsive.
- a. Agreement: To be executed by successful Bidder. Submit three (3) copies, each bearing an original signature.
 - b. Escrow of Bid Documentation: This must include all required documentation. See the document Escrow of Bid Documentation for more information.
 - c. Performance Bond (100%): On the form provided in the Contract Documents and fully executed as indicated on the form.
 - d. Payment Bond (100%) (Contractor's Labor and Material Bond): On the form provided in the Contract Documents and fully executed as indicated on the form.
 - e. Insurance Certificates and Endorsements as required.
 - f. Workers' Compensation Certification.
 - g. Prevailing Wage and Related Labor Requirements Certification.
 - h. Drug-Free Workplace Certification.
 - i. Tobacco-Free Environment Certification.
 - j. Hazardous Materials Certification.

- k. Lead-Based Paint Certification.
 - l. Criminal Background Investigation/Fingerprinting Certification.
 - m. Roofing Project Certification: from Contractor, Material Manufacturer and/or Vendor.
27. Any bid protest by any Bidder regarding any other bid must be submitted in writing to the District, before 4:00 p.m. of the **THIRD (3rd)** business day following bid opening.
- a. Only a Bidder who has actually submitted a bid, and who could be awarded the Contract if the bid protest is upheld, is eligible to submit a bid protest. Subcontractors are not eligible to submit bid protests. A Bidder may not rely on the bid protest submitted by another Bidder.
 - b. A bid protest must contain a complete statement of any and all bases for the protest and all supporting documentation. Materials submitted after the bid protest deadline will not be considered.
 - c. The protest must refer to the specific portions of all documents that form the basis for the protest.
 - (1) Without limitation to any other basis for protest, an inadvertent error in listing the California contractor license number on the Designated Subcontractors List shall not be grounds for filing a bid protest or grounds for considering the bid nonresponsive if the correct contractor's license number is submitted to the District within 24 hours after the bid opening and the corrected number corresponds with the submitted name and location for that subcontractor.
 - (2) Without limitation to other bases for protest, an inadvertent error listing an unregistered subcontractor shall not be grounds for filing a bid protest or grounds for considering the bid nonresponsive provided that any of the following apply:
 - (i) The subcontractor is registered prior to the bid opening.
 - (ii) The subcontractor is registered and has paid the penalty registration fee within 24 hours after the bid opening.
 - (iii) The subcontractor is replaced by another registered subcontractor pursuant to Public Contract Code section 4107.
 - d. The protest must include the name, address and telephone number of the person representing the protesting party.
 - e. The party filing the protest must concurrently transmit a copy of the protest and any attached documentation to all other parties with a direct financial interest that may be adversely affected by the outcome of the protest. Such parties shall include all other bidders or proposers who appear to have a reasonable prospect of receiving an award depending upon the outcome of the protest.

- f. The procedure and time limits set forth in this paragraph are mandatory and are each bidder's sole and exclusive remedy in the event of bid protest. Failure to comply with these procedures shall constitute a waiver of any right to further pursue the bid protest, including filing a Government Code Claim or legal proceedings.
- 28. District reserves the right to reject any or all bids, including without limitation the right to reject any or all nonconforming, non-responsive, unbalanced, or conditional bids, to re-bid, and to reject the bid of any bidder if District believes that it would not be in the best interest of the District to make an award to that bidder, whether because the bid is not responsive or the bidder is unqualified or of doubtful financial ability or fails to meet any other pertinent standard or criteria established by District. District also reserves the right to waive inconsequential deviations not involving price, time, or changes in the Work. For purposes of this paragraph, an "unbalanced bid" is one having nominal prices for some work items and/or enhanced prices for other work items.
- 29. Discrepancies between written words and figures, or words and numerals, will be resolved in favor of numerals or figures.
- 30. Prior to the award of Contract, District reserves the right to consider the responsibility of the Bidder. District may conduct investigations as District deems necessary to assist in the evaluation of any bid and to establish the responsibility, including, without limitation, qualifications and financial ability of Bidders, proposed subcontractors, suppliers, and other persons and organizations to perform and furnish the Work in accordance with the Contract Documents to District's satisfaction within the prescribed time.

END OF DOCUMENT

EXISTING CONDITIONS

1. Summary

This document describes existing conditions at or near the Project, and use of information available regarding existing conditions. This document is **not** part of the Contract Documents. See General Conditions for definition(s) of terms used herein.

2. Reports and Information on Existing Conditions

- a. Documents providing a general description of the Site and conditions of the Work may have been collected by Lodi Unified School District ("District"), its consultants, contractors, and tenants. These documents may, but are not required to, include previous contracts, contract specifications, tenant improvement contracts, as-built drawings, utility drawings, and information regarding underground facilities.
- b. Information regarding existing conditions may be inspected at the District offices or the Construction Manager's offices, if any, and copies may be obtained at cost of reproduction and handling upon Bidder's agreement to pay for such copies. These reports, documents, and other information are **not** part of the Contract Documents. These reports, documents, and other information do **not** excuse Contractor from fulfilling Contractor's obligation to independently investigate any or all existing conditions or from using reasonable prudent measures to avoid damaging existing improvements.
- c. Information regarding existing conditions may also be included in the Project Manual, but shall **not** be considered part of the Contract Documents.
- d. Prior to commencing this Work, Contractor and the District's representative shall survey the Site to document the condition of the Site. Contractor will record the survey in digital narrated videotape format and provide an electronic copy to the District within fourteen (14) days of the survey.
- e. Contractor may also document any pre-existing conditions in writing, provided that both the Contractor and the District's representative agree on said conditions and sign a memorandum documenting the same.
- f. The reports and other data or information regarding existing conditions and underground facilities at or contiguous to the Project are the following:
 - (1) Hazardous Materials indicated in Specification Section 02080 including in these contract documents.

3. Use of Information

- a. Information regarding existing conditions was obtained only for use of District and its consultants, contractors, and tenants for planning and design and is **not** part of the Contract Documents.

- b. District does not warrant, and makes no representation regarding, the accuracy or thoroughness of any information regarding existing conditions. Bidder represents and agrees that in submitting a bid it is not relying on any information regarding existing conditions supplied by District.
- c. Under no circumstances shall District be deemed to warrant or represent existing above-ground conditions, as-built conditions, or other actual conditions, verifiable by independent investigation. These conditions are verifiable by Contractor by the performance of its own independent investigation that Contractor must perform as a condition to bidding and Contractor should not and shall not rely on this information or any other information supplied by District regarding existing conditions.
- d. Any information shown or indicated in the reports and other data supplied herein with respect to existing underground facilities at or contiguous to the Project may be based upon information and data furnished to District by the District's employees and/or consultants or builders of such underground facilities or others. District does not assume responsibility for the completeness of this information, and Bidder is solely responsible for any interpretation or conclusion drawn from this information.
- e. District shall be responsible only for the general accuracy of information regarding underground facilities, and only for those underground facilities that are owned by District, and only where Bidder has conducted the independent investigation required of it pursuant to the Instructions to Bidders, and discrepancies are not apparent.

4. Investigations/Site Examinations

- a. Before submitting a Bid, each Bidder is responsible for conducting or obtaining any additional or supplementary examinations, investigations, explorations, tests, studies, and data concerning conditions (surface, subsurface, and underground facilities) at or contiguous to the Site or otherwise, that may affect cost, progress, performance, or furnishing of Work or that relate to any aspect of the means, methods, techniques, sequences, or procedures of construction to be employed by Bidder and safety precautions and programs incident thereto or that Bidder deems necessary to determine its Bid for performing and furnishing the Work in accordance with the time, price, and other terms and conditions of Contract Documents.
- b. On request, District will provide each Bidder access to the Site to conduct such examinations, investigations, explorations, tests, and studies, as each Bidder deems necessary for submission of a Bid. Bidders must fill all holes and clean up and restore the Site to its former condition upon completion of its explorations, investigations, tests, and studies. Such investigations and Site examinations may be performed during any and all Site visits indicated in the Notice to Bidders and only under the provisions of the Contract Documents, including, but not limited to, proof of insurance and obligation to indemnify against claims arising from such work, and District's prior approval.

END OF DOCUMENT

DOCUMENT 00 41 13
BID FORM AND PROPOSAL

To: The Board of Education of Lodi Unified School District ("District")

From: _____
(Proper Name of Bidder)

The undersigned declares that the Contract Documents, including, without limitation, the Notice to Bidders and the Instructions to Bidders, have been read, and agrees and proposes to furnish all necessary labor, materials, and equipment to perform and furnish all work in accordance with the terms and conditions of the Contract Documents, including, without limitation, the Drawings and Specifications of Bid No. _____.

PROJECT: **Lakewood Elementary School Roofing**

PROJECT NO. **0921-8221; 8150-5830-4**

("Project" or "Contract") and will accept in full payment for that Work the following total lump sum amount, all taxes included:

_____ Dollars (\$ _____)
Base Bid (not including the 5% Allowance) includes unit pricing total

5% Construction Allowance:

_____ Dollars (\$ _____)
Construction Allowance of eight percent (5%) of the Base Bid as referenced in the General Construction Provisions. General Contractor acknowledges a District controlled Construction Allowance as the contingency in the amount of which may be used by the District for the Project in the District's sole and absolute discretion.

Total Bid (Base Bid +5% Allowance):

_____ Dollars (\$ _____)

[IF APPLICABLE] Additive/Deductive Alternates:

Alternate #1
N/A _____ dollars \$ _____
Additive/Deductive

Descriptions of alternates are primarily scope definitions and do not necessarily detail the full range of materials and processes needed to complete the construction.

1. **Unit Prices**. The Bidder's Base Bid includes the following unit prices, which the Bidder must provide and the District may, at its discretion, utilize in valuing additive and/or deductive change orders (Unit Prices shall include all labor, materials,

services, profit, overhead, insurance, bonds, taxes, and all other incidental costs of Contractor, subcontractors, and suppliers):

SCHEDULE OF UNIT PRICES [LIST IN TABLE]

<u>Item No.</u>	<u>Description</u>	<u>Unit of Measure</u>	<u>Estimated Quantity</u>	<u>Unit Price</u>	<u>Total Cost</u> <u>= Unit Price</u> <u>x Estimated</u> <u>Quantity</u> <u>(Included</u> <u>in Base</u> <u>Bid)</u>
1	Plywood Decking (tear off and replacement)	\$/sq. ft.	192 sq. ft.	\$ _____	\$ _____
2	Plank Deck (tear off and replacement)	\$/linear ft.	64 lineal ft.	\$ _____	\$ _____
3	2" x 4" wood blocking remove and replace	\$/linear ft.	64 lineal ft.	\$ _____	\$ _____
4	2" x 6" wood blocking remove and replace	\$/linear ft.	64 lineal ft.	\$ _____	\$ _____
5	2" x 8" wood blocking remove and replace	\$/linear ft.	64 lineal ft.	\$ _____	\$ _____
6	2" x 10" wood blocking remove and replace	\$/linear ft.	64 lineal ft.	\$ _____	\$ _____
7	2" x 12" wood blocking remove and replace	\$/linear ft.	64 lineal ft.	\$ _____	\$ _____
8	4" x 4" wood blocking remove and replace	\$/linear ft.	64 lineal ft.	\$ _____	\$ _____

Total Unit Pricing (Dollars) _____

Where scope of Work is decreased, all Work pertaining to the item, whether specifically stated or not, shall be omitted, and where scope of Work is increased, all work pertaining to that item required to render same ready for use on the Project in

accordance with intentions of the Drawings and Specifications shall be included in the above agreed-upon price amount.

2. **Allowance.** The allowance of eight percent (8%) of the Bidder's Base Bid as referenced in the General Construction Provisions. The above allowance shall only be allocated for unforeseen items relating to the Work. Contractor shall not bill for or be due any portion of this allowance unless the District has identified specific work, Contractor has submitted a price for that work or the District has proposed a price for that work, the District has accepted the cost for that work, and the District has prepared a change order incorporating that work. Contractor hereby authorizes the District to execute a unilateral deductive change order at or near the end of the Project for all or any portion of the allowance not allocated.
3. The undersigned has reviewed the Work outlined in the Contract Documents and fully understands the scope of Work required in this Proposal, understands the construction and project management function(s) is described in the Contract Documents, and that each Bidder who is awarded a contract shall be in fact a prime contractor, not a subcontractor, to the District, and agrees that its Proposal, if accepted by the District, will be the basis for the Bidder to enter into a contract with the District in accordance with the intent of the Contract Documents.
4. The undersigned has notified the District in writing of any discrepancies or omissions or of any doubt, questions, or ambiguities about the meaning of any of the Contract Documents, and has contacted the Construction Manager before bid date to verify the issuance of any clarifying Addenda.
5. The undersigned agrees to commence work under this Contract on the date established in the Contract Documents and to complete all work within the time specified in the Contract Documents.
6. The liquidated damages clause of the General Conditions and Agreement is hereby acknowledged.
7. 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.
8. The following documents are attached hereto:
 - Bid Bond on the District's form or other security
 - Designated Subcontractors List
 - Non-Collusion Declaration
 - Iran Contracting Act Certification
9. Receipt and acceptance of the following addenda is hereby acknowledged:

No. _____, Dated _____	No. _____, Dated _____
No. _____, Dated _____	No. _____, Dated _____

No. _____, Dated _____	No. _____, Dated _____
------------------------	------------------------

10. Bidder acknowledges that the license required for performance of the Work is a _____ license.
11. The undersigned 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.
12. Bidder specifically acknowledges and understands that if it is awarded the Contract, that it shall perform the Work of the Project while complying with all requirements of the Department of Industrial Relations.
13. The Bidder represents that it is competent, knowledgeable, and has special skills with respect to the nature, extent, and inherent conditions of the Work to be performed. Bidder further acknowledges that there are certain peculiar and inherent conditions existent in the construction of the Work that may create, during the Work, unusual or peculiar unsafe conditions hazardous to persons and property.
14. Bidder expressly acknowledges that it is aware of such peculiar risks and that it has the skill and experience to foresee and to adopt protective measures to adequately and safely perform the Work with respect to such hazards.
15. Bidder expressly acknowledges that it is aware that if a false claim is knowingly submitted (as the terms "claim" and "knowingly" are defined in the California False Claims Act, Cal. Gov. Code, §12650 et seq.), the District will be entitled to civil remedies set forth in the California False Claim Act. It may also be considered fraud and the Contractor may be subject to criminal prosecution.
16. The undersigned Bidder certifies that it is, at the time of bidding, and shall be throughout the period of the contract, licensed by the State of California to do the type of work required under the terms of the Contract Documents and registered as a public works contractor with the Department of Industrial Relations. Bidder further certifies that it is regularly engaged in the general class and type of work called for in the Contract Documents.

Furthermore, Bidder hereby certifies to the District that all representations, certifications, and statements made by Bidder, as set forth in this bid form, are true and correct and are made under penalty of perjury.

Dated this _____ day of _____ 20 ____

Name of Bidder _____

Type of Organization _____

Signed by _____

Title of Signer _____

Address of Bidder _____

Taxpayer's Identification No. of Bidder _____

Telephone Number _____

Fax Number _____

E-mail _____ Web page _____

Contractor's License No(s): No.: _____ Class: _____ Expiration Date: _____

No.: _____ Class: _____ Expiration Date: _____

No.: _____ Class: _____ Expiration Date: _____

Public Works Contractor Registration No.: _____

If Bidder is a corporation, affix corporate seal.

Name of Corporation: _____

President: _____

Secretary: _____

Treasurer: _____

Manager: _____

END OF DOCUMENT

BID BOND

(Note: If Bidder is providing a bid bond as its bid security, Bidder must use this form, NOT a surety company form.)

KNOW ALL PERSONS BY THESE PRESENTS:

That the undersigned, as _____ as Principal ("Principal"),
and _____ as Surety ("Surety"), a
corporation organized and existing under and by virtue of the laws of the State of
and authorized to do business as a surety in the State of California, are held and firmly
bound unto the _____ School District ("District") of _____
County, State of California as Obligee, in the sum of _____ Dollars (\$ ____
_____) lawful money of the United States of America, for the payment of which sum well
and truly to be made, we, and each of us, bind ourselves, our heirs, executors,
administrators, successors, and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH that whereas the Principal has submitted a
bid to the District for all Work specifically described in the accompanying bid;

NOW, THEREFORE, if the Principal is awarded the Contract and, within the time and manner
required under the Contract Documents, after the prescribed forms are presented to
Principal for signature, enters into a written contract, in the prescribed form in accordance
with the bid, and files two bonds, one guaranteeing faithful performance and the other
guaranteeing payment for labor and materials as required by law, and meets all other
conditions to the contract between the Principal and the Obligee becoming effective, or if
the Principal shall fully reimburse and save harmless the Obligee from any damage
sustained by the Obligee through failure of the Principal to enter into the written contract
and to file the required performance and labor and material bonds, and to meet all other
conditions to the Contract between the Principal and the Obligee becoming effective, then
this obligation shall be null and void; otherwise, it shall be and remain in full force and
effect. The full payment of the sum stated above shall be due immediately if Principal fails
to execute the Contract within seven (7) days of the date of the District's Notice of Award to
Principal.

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 to the work to be
performed thereunder, or the specifications accompanying the same, shall in any way 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 the Contract or the call for bids, or
to the work, or to the specifications.

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

If the District awards the bid, the security of unsuccessful bidder(s) shall be returned within
sixty (60) days from the time the award is made. Unless otherwise required by law, no
bidder may withdraw its bid for ninety (90) days after the date of the bid opening.

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

(Affix Corporate Seal)

Principal

By

(Affix Corporate Seal)

Surety

By

Name of California Agent of Surety

Address of California Agent of Surety

Telephone Number of California Agent of Surety

Bidder must attach Power of Attorney and Certificate of Authority for Surety and a Notarial Acknowledgment for all Surety's signatures. The California Department of Insurance must authorize the Surety to be an admitted Surety Insurer.

END OF DOCUMENT

DESIGNATED SUBCONTRACTORS LIST
(TO BE EXECUTED BY BIDDER AND SUBMITTED WITH BID)

PROJECT: **Lakewood Elementary School Roofing**

Bidder acknowledges and agrees that under Public Contract Code section 4100, et seq., it must clearly set forth below the name, location and California contractor license number of each subcontractor who will perform work or labor or render service to the Bidder in or about the construction of the Work or who will specially fabricate and install a portion of the Work according to detailed drawings contained in the plans and specifications in an amount in excess of one-half of one percent (0.5%) of Bidder's total Bid and the kind of Work that each will perform. Vendors or suppliers of materials only do not need to be listed.

Bidder acknowledges and agrees that under Public Contract Code section 4100, et seq., if Bidder fails to list as to any portion of Work, or if Bidder lists more than one subcontractor to perform the same portion of Work, Bidder must perform that portion itself or be subjected to penalty under applicable law. In case more than one subcontractor is named for the same kind of Work, state the portion of the kind of Work that each subcontractor will perform.

If alternate bids are called for and Bidder intends to use subcontractors different from or in addition to those subcontractors listed for work under the base Bid, Bidder must list subcontractors that will perform Work in an amount in excess of one half of one percent (0.5%) of Bidder's total Bid, including alternates.

If further space is required for the list of proposed subcontractors, attach additional sheets showing the required information, as indicated below.

Subcontractor Name: _____

CA Cont. Lic. #: _____ Location: _____

Portion of Work: _____

Subcontractor Name: _____

CA Cont. Lic. #: _____ Location: _____

Portion of Work: _____

Subcontractor Name: _____

CA Cont. Lic. #: _____ Location: _____

Portion of Work: _____

Subcontractor Name: _____

CA Cont. Lic. #: _____ Location: _____

Portion of Work: _____

Subcontractor Name: _____

CA Cont. Lic. #: _____ Location: _____

Portion of Work: _____

Subcontractor Name: _____

CA Cont. Lic. #: _____ Location: _____

Portion of Work: _____

Subcontractor Name: _____

CA Cont. Lic. #: _____ Location: _____

Portion of Work: _____

Subcontractor Name: _____

CA Cont. Lic. #: _____ Location: _____

Portion of Work: _____

Subcontractor Name: _____

CA Cont. Lic. #: _____ Location: _____

Portion of Work: _____

Subcontractor Name: _____

CA Cont. Lic. #: _____ Location: _____

Portion of Work: _____

Date: _____

Proper Name of Bidder: _____

Signature: _____

Print Name: _____

Title: _____

END OF DOCUMENT

SITE VISIT CERTIFICATION

TO BE EXECUTED BY BIDDER AND SUBMITTED WITH BID
IF SITE VISIT WAS MANDATORY

PROJECT: _____

Check option that applies:

_____ I certify that I visited the Site of the proposed Work, received the attached _____ pages of information, and became fully acquainted with the conditions relating to construction and labor. I fully understand the facilities, difficulties, and restrictions attending the execution of the Work under contract.

_____ I certify that _____ (Bidder's representative) visited the Site of the proposed Work, received the attached _____ pages of information, and became fully acquainted with the conditions relating to construction and labor. The Bidder's representative fully understood the facilities, difficulties, and restrictions attending the execution of the Work under contract.

Bidder fully indemnifies the Lodi Unified School District, its Architect, its Engineers, its 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 my visit and/or the Bidder's representative's visit to the Site.

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

Date: _____

Proper Name of Bidder: _____

Signature: _____

Print Name: _____

Title: _____

ATTACHMENTS:

- 1.
- 2.
- 3.

END OF DOCUMENT

**NON-COLLUSION DECLARATION
TO BE EXECUTED BY BIDDER AND SUBMITTED WITH BID
Public Contract Code Section 7106**

The undersigned declares:

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

The bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation. The bid is genuine and not collusive or sham. The bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid. The bidder has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or anyone else to put in a sham bid, or to refrain from bidding. The bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the bidder or any other bidder, or to fix any overhead, profit, or cost element of the bid price, or of that of any other bidder. All statements contained in the bid are true. The bidder has not, directly or indirectly, submitted his or her bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, to any corporation, partnership, company, association, organization, bid depository, or to any member or agent thereof, to effectuate a collusive or sham bid, and has not paid, and will not pay, any person or entity for such purpose.

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

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

Date: _____

Proper Name of Bidder: _____

Signature: _____

Print Name: _____

Title: _____

END OF DOCUMENT

IRAN CONTRACTING ACT CERTIFICATION
(Public Contract Code sections 2202-2208)

PROJECT/CONTRACT NO.: 0921-8221; 8150-5830-4 between Lodi Unified School District ("District") and _____ ("Contractor" or "Bidder") ("Contract" or "Project").

Prior to bidding on or submitting a proposal for a contract for goods or services of \$1,000,000 or more to the District, the Bidder must either: a) certify it is **not** on the current list of persons engaged in investment activities in Iran created by the California Department of General Services ("DGS") pursuant to Public Contract Code section 2203(b) and is not a financial institution extending twenty million dollars (\$20,000,000) or more in credit to another person, for 45 days or more, if that other person will use the credit to provide goods or services in the energy sector in Iran and is identified on the current list of persons engaged in investment activities in Iran created by DGS; or b) demonstrate it has been exempted from the certification requirement for that solicitation or contract pursuant to Public Contract Code section 2203(c) or (d).

To comply with this requirement, please insert your vendor or financial institution name and Federal ID Number (if available) and complete **one** of the options below. Please note: California law establishes penalties for providing false certifications, including civil penalties equal to the greater of \$250,000 or twice the amount of the contract for which the false certification was made; contract termination; and three-year ineligibility to bid on contracts. (Public Contract Code section 2205.)

OPTION #1 - CERTIFICATION

I, the official named below, certify I am duly authorized to execute this certification on behalf of the vendor/financial institution identified below, and the vendor/financial institution identified below is **not** on the current list of persons engaged in investment activities in Iran created by DGS and is not a financial institution extending twenty million dollars (\$20,000,000) or more in credit to another person/vendor, for 45 days or more, if that other person/vendor will use the credit to provide goods or services in the energy sector in Iran and is identified on the current list of persons engaged in investment activities in Iran created by DGS.

<i>Vendor Name/Financial Institution (Printed)</i>		<i>Federal ID Number (or n/a)</i>
<i>By (Authorized Signature)</i>		
<i>Printed Name and Title of Person Signing</i>		
<i>Date Executed</i>	<i>Executed in</i>	

OPTION #2 – EXEMPTION

Pursuant to Public Contract Code sections 2203(c) and (d), a public entity may permit a vendor/financial institution engaged in investment activities in Iran, on a case-by-case basis, to be eligible for, or to bid on, submit a proposal for, or to enter into or to renew, a contract for goods and services.

If you have obtained an exemption from the certification requirement under the Iran Contracting Act, please fill out the information below, and attach documentation demonstrating the exemption approval.

<i>Vendor Name/Financial Institution (Printed)</i>	<i>Federal ID Number (or n/a)</i>
<i>By (Authorized Signature)</i>	
<i>Printed Name and Title of Person Signing</i>	<i>Date Executed</i>

END OF DOCUMENT

WORKERS' COMPENSATION CERTIFICATION

PROJECT/CONTRACT NO.: 0921-8221; 8150-5830-4 between Lodi Unified School District __
("District") and _____ ("Contractor" or "Bidder") ("Contract" or
"Project").

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:

- a. By being insured against liability to pay compensation by one or more insurers duly authorized to write compensation insurance in this state; and/or
- b. 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 his employees.

I am aware of the provisions of section 3700 of the Labor Code which require every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of that code, and I will comply with such provisions before commencing the performance of the Work of this Contract.

Date: _____

Proper Name of Contractor: _____

Signature: _____

Print Name: _____

Title: _____

(In accordance with Labor Code sections 1860 and 1861, the above certificate must be signed and filed with the awarding body prior to performing any Work under this Contract.)

END OF DOCUMENT

**PREVAILING WAGE AND
RELATED LABOR REQUIREMENTS CERTIFICATION**

PROJECT/CONTRACT NO.: 0921-8221; 8150-5830-4 between Lodi Unified School District ("District")
and _____ ("Contractor" or "Bidder")
("Contract" or "Project").

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, labor compliance monitoring and enforcement by the Department of Industrial Relations.

Date: _____

Proper Name of Contractor: _____

Signature: _____

Print Name: _____

Title: _____

END OF DOCUMENT

DRUG-FREE WORKPLACE CERTIFICATION

PROJECT/CONTRACT NO.: 0921-8221; 8150-5830-4 between Lodi Unified School District ("District") and _____ ("Contractor" or "Bidder") ("Contract" or "Project").

This Drug-Free Workplace Certification form is required from the successful Bidder pursuant to 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.

The District is not a "state agency" as defined in the applicable section(s) of the Government Code, but the District is a local agency and public school district under California law and requires all contractors on District projects to comply with the provisions and requirements of Government Code section 8350 et seq., the Drug-Free Workplace Act of 1990.

Contractor 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 above, 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 (c) 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 the aforementioned Act.

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: _____

Print Name: _____

Title: _____

END OF DOCUMENT

TOBACCO-FREE ENVIRONMENT CERTIFICATION

PROJECT/CONTRACT NO.: 0921-8221; 8150-5830-4 between Lodi Unified School District ____
("District") and _____ ("Contractor" or "Bidder")
("Contract" or "Project").

This Tobacco-Free Environment Certification form is required from the successful Bidder.

Pursuant to, without limitation, 20 U.S.C section 6083, Labor Code section 6400 et seq., Health & Safety Code section 104350 et seq. and District Board Policies, all District sites, including the Project site, are tobacco-free environments. Smoking and the use of tobacco products by all persons is prohibited on or in District property. District property includes school buildings, school grounds, school owned vehicles and vehicles owned by others while on District property.

I acknowledge that I am aware of the District's policy regarding 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:

Proper Name of Contractor:

Signature:

Print Name:

Title:

END OF DOCUMENT

HAZARDOUS MATERIALS CERTIFICATION

PROJECT/CONTRACT NO.: 0921-8221; 8150-5830-4 between Lodi Unified School District ("District")
and _____ ("Contractor" or "Bidder")
("Contract" or "Project").

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 or 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 any 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, tremolite, 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: _____

Print Name: _____

Title: _____

END OF DOCUMENT

LEAD-BASED MATERIALS CERTIFICATION

PROJECT/CONTRACT NO.: 0921-8221; 8150-5830-4 between Lodi Unified School District ("District") and _____ ("Contractor" or "Bidder") ("Contract" or "Project").

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 disburses 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.)

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 renovations firms, using renovators with training by a 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 area 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, or 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 therefrom.

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: _____

Print Name: _____

Title: _____

END OF DOCUMENT

IMPORTED MATERIALS CERTIFICATION

PROJECT/CONTRACT NO.: _____ between the Lodi Unified School District ("District") and _____ ("Contractor" or "Bidder") ("Contract" or "Project").

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 and shall be provided to the District at least ten (10) days before delivery. 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 ☐ Supplier ☐ Manufacturer
☐ Wholesaler ☐ Broker ☐ Retailer
☐ Distributor ☐ Other _____

Type of Entity ☐ Corporation ☐ General Partnership
☐ Limited Partnership ☐ Limited Liability Company
☐ Sole Proprietorship ☐ 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 Firm: _____

Signature: _____

Print Name: _____

Title: _____

END OF DOCUMENT

CRIMINAL BACKGROUND
INVESTIGATION/ FINGERPRINTING CERTIFICATION

PROJECT/CONTRACT NO.: 0921-8221; 8150-5830-4 between the Lodi Unified School District
(~~the~~ District") _____ ("Contractor" or "Bidder").

The undersigned does hereby certify to the governing board of the District as follows:

That I am a representative of the Contractor currently under contract with the District; that I am familiar with the facts herein certified; and that I am authorized and qualified to execute this certificate on behalf of Contractor.

- _____ Contractor certifies that it has taken at least one of the following actions with respect to the construction Project that is the subject of the Contract (check all that applies):
- _____ The Contractor has complied with the fingerprinting requirements of Education Code section 45125.1 with respect to all Contractor's employees and all of its Subcontractors' employees who may have contact with District pupils in the course of providing services pursuant to the Contract, and the California Department of Justice has determined that none of those employees has been convicted of a felony, as that term is defined in Education Code section 45122.1. A complete and accurate list of Contractor's employees and of all of its subcontractors' employees who may come in contact with District pupils during the course and scope of the Contract is attached hereto; and/or
- _____ Pursuant to Education Code section 45125.2, Contractor has installed or will install, prior to commencement of Work, a physical barrier at the Work Site, that will limit contact between Contractor's employees and District pupils at all times; and/or
- _____ Pursuant to Education Code section 45125.2, Contractor certifies that all employees will be under the continual supervision of, and monitored by, an employee of the Contractor who the California Department of Justice has ascertained has not been convicted of a violent or serious felony. The name and title of the employee who will be supervising Contractor's employees and its subcontractors' employees is
- Name: _____
- Title: _____
- _____ The Work on the Contract is at an unoccupied school site and no employee and/or subcontractor or supplier of any tier of Contract shall come in contact with the District pupils.

Contractor's responsibility for background clearance extends to all of its employees, Subcontractors, and employees of Subcontractors coming into contact with District pupils regardless of whether they are designated as employees or acting as independent contractors of the Contractor.

Date: _____

Proper Name of Contractor: _____

Signature: _____

Print Name: _____

Title: _____

END OF DOCUMENT

BUY AMERICAN CERTIFICATION

PROJECT/CONTRACT NO.: _____ between the Lodi Unified School District ("District") and _____ ("Contractor" or "Bidder") ("Contract" or "Project").

Federal regulations require that all of the iron, steel, and manufactured goods used in projects for the construction, installation, repairs, renovation, modernization, or maintenance of a public building or public work funded in part or in whole by federal stimulus funds, with the exception of projects funded by Qualified School Construction Bonds, be produced in the United States of America, unless a federal department waives this requirement because (1) it is inconsistent with the public interest, (2) the goods are not produced in sufficient quantities or of satisfactory quality in the United States, or (3) the requirement would increase the cost of the Project overall by more than twenty-five percent (25%) ("Buy American").

Contractor shall submit this Certification with its executed agreement, identifying the steps Contractor will take to use goods produced in the United States of America in carrying out this Contract. Bidder should not submit this form with its bid.

Contractor shall retain a copy of this form and may be subject to a future audit.

CERTIFICATION

On behalf of Contractor, I represent and covenant that Contractor will use on the Project only iron, steel and manufactured goods produced in the United States of America except goods for which a federal department has waived this requirement.

I, _____, certify that I am the Contractor's _____ and that the representations and covenants made herein are true and correct. In making this certification, I am aware of section 12650 et seq. of the Government Code providing for the imposition of treble damages for making false claims.

Date: _____

Proper Name of Contractor: _____

Signature: _____

Print Name: _____

Title: _____

END OF DOCUMENT

ROOFING PROJECT CERTIFICATION

PROJECT/CONTRACT NO.: 0921-8221; 8150-5830-4 between Lodi Unified School District _
("District") and _____
("Contractor" or "Bidder").

This form shall be executed by all contractors, materials manufacturers, or vendors involved in a bid or proposal for the repair or replacement of a roof of a public school building where the project is either for repair of more than 25% of the roof or that has a total cost more than \$21,000 ("roofing project") and submitted to the District when the award is made.

Certification of: ☐ Contractor ☐ Materials Manufacturer
 ☐ Vendor ☐ Other _____

I, _____ [Name of Firm], certify that I have not offered, given, or agreed to give, received, accepted, or agreed to accept, any gift, contribution, or any financial incentive whatsoever to or from any person in connection with the roofing project contract. As used in this certification, "person" means any natural person, business, partnership, corporation, union, committee, club, or other organization, entity, or group of individuals.

Furthermore, I, _____ [Name of Firm], certify that I do not have, and throughout the duration of the contract, I will not have, any financial relationship in connection with the performance of this contract with any architect, engineer, roofing consultant, materials manufacturer, distributor, or vendor that is not disclosed below.

I, _____ [Name of Firm], have the following financial relationships with an architect, engineer, roofing consultant, materials manufacturer, distributor, or vendor, or other person in connection with the following roofing project contract (provide Name and Address of Building, and Contract Date and Number):

By my signature below, I hereby certify that, to the best of my knowledge, the contents of this disclosure are true, or are believed to be true. I further certify on behalf of the Firm that I am aware of section 3000 et seq. of the California Public Contract Code, and the

sections referenced therein regarding the penalties for providing false information or failing to disclose a financial relationship in this disclosure. I further certify that I am authorized to make this certification on behalf of the Firm.

Date: _____

Proper Name of Firm: _____

Signature: _____

Print Name: _____

Title: _____

END OF DOCUMENT

REGISTERED SUBCONTRACTORS LIST
(Labor Code Section 1771.1)

PROJECT: _____

Date Submitted (for Updates): _____

Contractor acknowledges and agrees that it must clearly set forth below the name and Department of Industrial Relations (DIR) registration number of each subcontractor **for all tiers** who will perform work or labor or render service to Contractor or its subcontractors in or about the construction of the Work **at least two (2) weeks before the subcontractor is scheduled to perform work**. This document is to be updated as all tiers of subcontractors are identified.

Contractor acknowledges and agrees that, if Contractor fails to list as to any subcontractor of any tier who performs any portion of Work, the Contract is subject to cancellation and the Contractor will be subjected to penalty under applicable law.

If further space is required for the list of proposed subcontractors, attach additional copies of page 2 showing the required information, as indicated below.

Subcontractor Name: _____

DIR Registration #: _____

Portion of Work: _____

Subcontractor Name: _____

DIR Registration #: _____

Portion of Work: _____

Subcontractor Name: _____

DIR Registration #: _____

Portion of Work: _____

Subcontractor Name: _____

DIR Registration #: _____

Portion of Work: _____

Subcontractor Name: _____

DIR Registration #: _____

Portion of Work: _____

Subcontractor Name: _____

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Subcontractor Name: _____

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Portion of Work: _____

Subcontractor Name: _____

DIR Registration #: _____

Portion of Work: _____

Subcontractor Name: _____

DIR Registration #: _____

Portion of Work: _____

Subcontractor Name: _____

DIR Registration #: _____

Portion of Work: _____

Date: _____

Name of Contractor: _____

Signature: _____

Print Name: _____

Title: _____

END OF DOCUMENT

POST BID INTERVIEW

PART 1 – GENERAL

1.01 SUMMARY

If requested by the District, this Section requires the apparent low bidder to attend and participate in a Post Bid Interview with the Construction Manager, prior to award of any contract by the District. The Post Bid Interview will be scheduled by the Construction Manager within three (3) calendar days after the date of bid.

1.02 REQUIRED ATTENDANCE

- A. A duly authorized representative of the apparent low bidder is required to attend the Post Bid Interview, in person.
- B. The apparent low bidder's authorized representative must have signatory authority on behalf of the apparent low bidder.
- C. Failure to attend the Post Bid Interview will be considered just cause for the District to reject the Bid.

1.03 POST BID INTERVIEW PROCEDURE

- A. The Construction Manager will review the Bid with the attendees.
- B. The Construction Manager will review the Contract Documents with the attendees, including but not limited to:
 - (1) Insurance
 - (2) Bonding
 - (3) Addenda
 - (4) Pre-Bid Clarifications
 - (5) Scope of Work
 - (6) Bid Packages Descriptions
 - (7) Bid Alternates
 - (8) The Contract Plans
 - (9) The Contract Specifications
 - (10) The Project Schedule and Schedule Requirements
 - (11) Critical Dates Requirement for Other Bid Packages

- (12) Prevailing Wage Requirements
- (13) Liquidated Damages
- (14) Required Documentation for Contract Administration
- (15) Contract Coordination Requirements

1.04 POST BID INTERVIEW DOCUMENTATION

The Construction Manager will document the Post Bid Interview on the form attached to this Section. Both the Apparent Low Bidder and the Construction Manager are required to sign the Post Bid Interview Documentation.

POST BID INTERVIEW

CONSTRUCTION MANAGER

[Name]

[Address 1]

[Address 2]

[Phone]

[Fax]

PROJECT NO: ____ - ____ PROJECT NAME: _____

BIDDER: _____

DATE: _____ TIME: _____ PHONE: _____

I. INTRODUCTIONS:

A. Present

CONTRACTOR

CONTRACTOR

[CM]

[CM]

II. PROPOSED CONTRACT:

III. PURPOSE OF INTERVIEW IS TO ASSURE:

A. Do you acknowledge submission of a complete and accurate bid? Yes No

B. Do you acknowledge the Bid Document submittal timelines after NOA and NTP and can you meet those timelines? Yes No

C. Do you acknowledge the requirements for the escrow of bid documents? Yes No

D. Are you comfortable with your listed subcontractors? Yes No

IV. CONTRACTUAL REQUIREMENTS:

A. Do you understand you are a prime contractor? Yes No

B. Can you meet specified insurance requirements? Yes No

1. Do any of your policies that require Additional Insured endorsements exceed the minimum coverage requirements? Yes No

2. Are you requesting that the District accept an Umbrella or Excess Liability Insurance Policy to meet the policy limit? Yes No

- | | | | |
|----|---|-----|----|
| 3. | Will there be a gap between the per occurrence amount of any underlying policy and the start of the coverage under the Umbrella or Excess Liability Insurance Policy? | Yes | No |
| C. | Will you provide the Performance, and a Labor and Material Bond for 100% of the Contract Price as stipulated? | Yes | No |
| 1. | Cost for bond: _____% | Yes | No |
| 2. | Is the cost of your bond in your base bid? | Yes | No |
| 3. | Is your surety licensed to issue bonds in California? | Yes | No |
| D. | Do you understand the fingerprinting requirements? | Yes | No |

V. SCOPE OF WORK:

- | | | | |
|----|--|-----|----|
| A. | Acknowledged Receipt of Addenda #1-___ | Yes | No |
| B. | Are the costs for addenda items included in your bid? (if applicable) | Yes | No |
| C. | Do you have a complete understanding of your Scope of Work under the proposed Agreement? | Yes | No |
| D. | You have re-reviewed the documents and understand the Scope of the Work. Are there any items that require clarification? | Yes | No |

If yes, please identify them.

1. _____

2. _____

3. _____

4. _____

5. _____

Is (are) there additional cost(s) for the above items?	Yes	No
--	-----	----

- E. Review bid alternative (if applicable) #1-____
- F. Are the plans and specifications clear and understandable to your satisfaction? Yes No
- G. Do you acknowledge that the time to submit notice of requests for substitution of specified materials has expired? Yes No

VI. SCHEDULE:

- A. Do you acknowledge and agree to the stipulated completion dates and milestones in the contract? Yes No
1. Will you provide a detailed construction schedule to _____ within the required ten (10) days of the Notice to Proceed, per the contract? Yes No
2. Can you meet the submittal deadline? Yes No
3. It is understood that the Project schedule is critical and that that weekend and overtime work may be required to meet the milestones. Yes No
4. It is understood that if rain does occur, then all dewatering and protection of work is required, per the contract. Yes No
If not, what do you believe must change and why? _____

- B. Identify critical materials, deliveries, long lead items and other dependencies, including Owner Furnished items that could affect the completion of your work. Yes No

1. _____
2. _____
3. _____
4. _____
5. _____

- C. Do you understand that there is going to be maintenance and other construction taking place on site during the course of the project? Yes No

VII. EXECUTION OF WORK

- | | | | |
|----|---|-----|----|
| A. | Do you understand the access to the site? | Yes | No |
| B. | Do you understand the staging area restrictions? | Yes | No |
| C. | Have you included protection of [asphalt, floors, and roofs]? | Yes | No |
| D. | Do you understand that the site is occupied by students, teachers, administrators, parents, etc.? | Yes | No |

VIII. CONTRACTOR COMMENTS/SUGGESTIONS:

1. _____
2. _____
3. _____
4. _____
5. _____

IX. CONTRACTOR

You agree the information contained herein is part of your contractual obligations. Your signature acknowledges your agreement to perform all Work in the Contract Documents, and that costs for all Work are included in your bid.

The foregoing information is true and accurate, and I am authorized to sign as an officer of the company I am representing.

[Company Name]

Signature _____ Title: _____

Date: _____

X. CONSTRUCTION MANAGER

Signature _____ Title: _____

Date: _____

Title of Document: POST BID INTERVIEW

Number of Pages: _____

Date of Document: _____

END OF DOCUMENT

NOTICE OF AWARD

Dated: _____ 2023

To: _____ (Contractor)

To: _____
(Address)

From: The Board of Education ("Board") of Lodi Unified School District ("District" or "Owner")

PROJECT: Lakewood Elementary School Roofing,
Project No. 0921-8221; 8150-5830-4 ("Project").
Contractor has been awarded the referenced Contract on _____, 20__, by
action of the District's Board.

The Contract Price is _____ Dollars (\$_____), and
includes alternates _____.

Three (3) copies of each of the Contract Documents (except Drawings) accompany this
Notice of Award. Three (3) sets of the Drawings will be delivered separately or otherwise
made available. Additional copies are available at cost of reproduction.

You must comply with the following conditions precedent within **SEVEN (7)** calendar days
of the date of this Notice of Award.

The Contractor shall execute and submit the following documents by 4:00 p.m. of the
SEVENTH (7th) calendar day following the date of the Notice of Award.

- a. Agreement: To be executed by successful Bidder on _____ 20__ @
_____ am/pm at LUSD Facilities & Planning Dept. office, each bearing an
original signature (3 copies).
- b. Escrow of Bid Documentation: This must include all required documentation.
See the document Escrow of Bid Documentation for more information.
- c. Performance Bond (100%): On the form provided in the Contract Documents
and fully executed as indicated on the form.
- d. Payment Bond (Contractor's Labor & Material Bond) (100%): On the form
provided by the District and fully executed as indicated on the form.
- e. Insurance Certificates and Endorsements as required.
- f. Workers' Compensation Certification.
- g. Prevailing Wage and Related Labor Requirements Certification.
- h. Drug-Free Workplace Certification.

- i. Tobacco-Free Environment Certification.
- j. Hazardous Materials Certification.
- k. Lead-Based Paint Certification.
- l. Criminal Background Investigation/Fingerprinting Certification.
- m. Roofing Project Certification: from Contractor, Material Manufacturer and/or Vendor.

Failure to comply with these conditions within the time specified will entitle District to consider your bid abandoned, to annul this Notice of Award, and to declare your Bid Security forfeited, as well as any other rights the District may have against the Contractor.

After you comply with those conditions, District will return to you one fully signed counterpart of the Agreement.

_____ SCHOOL DISTRICT

BY: _____

NAME: _____

TITLE: _____

END OF DOCUMENT

AGREEMENT

THIS AGREEMENT IS MADE AND ENTERED INTO THIS _____ DAY OF _____
_____, 20____, by and between the Lodi Unified School District ("District") and _____
_____ ("Contractor") ("Agreement").

WITNESSETH: That the parties hereto have mutually covenanted and agreed, and by these presents do covenant and agree with each other, as follows:

1. **The Work:** Contractor agrees to furnish all tools, equipment, apparatus, facilities, labor, and material necessary to perform and complete in a good and workmanlike manner, the work of the following project:

PROJECT NAME: Lakewood Elementary School Roofing
PROJECT NO: 0921-8221; 8150-5830-4

It is understood and agreed that the Work shall be performed and completed as required in the Contract Documents including, without limitation, the Drawings and Specifications and submission of all documents required to secure funding or by the Division of the State Architect for close-out of the Project, under the direction and supervision of, and subject to the approval of, the District or its authorized representative.

2. **The Contract Documents:** The complete Contract consists of all Contract Documents as defined in the General Conditions and incorporated herein by this reference. Any and all obligations of the District and Contractor are fully set forth and described in the Contract Documents. All Contract Documents are intended to cooperate so that any Work called for in one and not mentioned in the other or vice versa is to be executed the same as if mentioned in all Contract Documents.
3. **Interpretation of Contract Documents:** Should any question arise concerning the intent or meaning of Contract Documents, including the Drawings or Specifications, the question shall be submitted to the District for interpretation. If a conflict exists in the Contract Documents, valid, written modifications, beginning with the most recent, shall control over this Agreement (if any), which shall control over the Special Conditions, which shall control over any Supplemental Conditions, which shall control over the General Conditions, which shall control over the remaining Division 0 documents, which shall control over Division 1 Documents which shall control over Division 2 through Division 18 documents, which shall control over figured dimensions, which shall control over large-scale drawings, which shall control over small-scale drawings. In no case shall a document calling for lower quality and/or quantity material or workmanship control. The decision of the District in the matter shall be final.
4. **Time for Completion:** It is hereby understood and agreed that the work under this contract shall be completed within **FIFTY EIGHT (58)** consecutive calendar days ("Contract Time") from the date specified in the District's Notice to Proceed.
5. **Completion-Extension of Time:** Should the Contractor fail to complete this Contract, and the Work provided herein, within the time fixed for completion, due allowance being made for the contingencies provided for herein, the Contractor shall become liable to the District for all loss and damage that the District may suffer on

account thereof. The Contractor shall coordinate its work with the Work of all other contractors. The District shall not be liable for delays resulting from Contractor's failure to coordinate its Work with other contractors in a manner that will allow timely completion of Contractor's Work. Contractor shall be liable for delays to other contractors caused by Contractor's failure to coordinate its Work with the work of other contractors.

6. **Liquidated Damages:** Time is of the essence for all work under this Agreement. It is hereby understood and agreed that it is and will be difficult and/or impossible to ascertain and determine the actual damage that the District will sustain in the event of and by reason of Contractor's delay; therefore, Contractor agrees that it shall pay to the District the sum of **FIVE HUNDRED DOLLARS (\$500)** per day as liquidated damages for each and every day's delay beyond the time herein prescribed in finishing the Work

It is hereby understood and agreed that this amount is not a penalty.

In the event that any portion of the liquidated damages is not paid to the District, the District may deduct that amount from any money due or that may become due the Contractor under this Agreement, and such deduction does not constitute a withholding or penalty. The District's right to assess liquidated damages is as indicated herein and in the General Conditions.

The time during which the Contract is delayed for cause, as hereinafter specified, may extend the time of completion for a reasonable time as the District may grant, provided that Contractor has complied with the claims procedure of the Contract Documents. This provision does not exclude the recovery of damages by either party under other provisions in the Contract Documents.

7. **Loss Or Damage:** The District and its authorized representatives shall not in any way or manner be answerable or suffer loss, damage, expense, or liability for any loss or damage that may happen to the Work, or any part thereof, or in or about the same during its construction and before acceptance, and the Contractor shall assume all liabilities of every kind or nature arising from the Work, either by accident, negligence, theft, vandalism, or any cause whatever; and shall hold the District and its agents and authorized representatives harmless from all liability of every kind and nature arising from accident, negligence, or any cause whatever.
8. **Insurance and Bonds:** Prior to issuance of the Notice to Proceed by the District, Contractor shall provide all required certificates of insurance, insurance endorsements, and payment and performance bonds as evidence thereof.
9. **Prosecution of Work:** If the Contractor should neglect to prosecute the Work properly or fail to perform any provisions of this Contract, the District, may, pursuant to the General Conditions and without prejudice to any other remedy it may have, make good such deficiencies and may deduct the cost thereof from the payment then or thereafter due the Contractor.
10. **Authority of Architect, Project Inspector, and DSA:** Contractor hereby acknowledges that the Architect(s), the Project Inspector(s), and the Division of the State Architect have authority to approve and/or suspend Work if the Contractor's Work does not comply with the requirements of the Contract Documents, Title 24 of

the California Code of Regulations, and all applicable laws and regulations. The Contractor shall be liable for any delay caused by its non-compliant Work.

11. **Assignment of Contract:** Neither the Contract, nor any part thereof, nor any moneys due or to become due thereunder, may be assigned by the Contractor without the prior written approval of the District, nor without the written consent of the Surety on the Contractor's Performance Bond (the "Surety"), unless the Surety has waived in writing its right to notice of assignment.
12. **Classification of Contractor's License:** Contractor hereby acknowledges that it currently holds valid Type A or B Contractor's license(s) issued by the State of California, Contractor's State Licensing Board, in accordance with division 3, chapter 9, of the Business and Professions Code and in the classification called for in the Contract Documents.
13. **Registration as Public Works Contractor:** The Contractor and all Subcontractors currently are registered as public works contractors with the Department of Industrial Relations, State of California, in accordance with Labor Code section 1771.4.
14. **Payment of Prevailing Wages:** The Contractor and all Subcontractors 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 sections 1770 et seq. of the California Labor Code
15. This Project is subject to labor compliance monitoring and enforcement by the Department of Industrial Relations pursuant to Labor Code section 1771.4 and Title 8 of the California Code of Regulations. Contractor specifically acknowledges and understands that it shall perform the Work of this Agreement while complying with all the applicable provisions of Division 2, Part 7, Chapter 1, of the Labor Code, including, without limitation, the requirement that the Contractor and all of its Subcontractors shall timely submit complete and accurate electronic certified payroll records as required by the Contract Documents, or the District may not issue payment.
16. **Contract Price:** In consideration of the foregoing covenants, promises, and agreements on the part of the Contractor, and the strict and literal fulfillment of each and every covenant, promise, and agreement, and as compensation agreed upon for the Work and construction, erection, and completion as aforesaid, the District covenants, promises, and agrees that it will well and truly pay and cause to be paid to the Contractor in full, and as the full Contract Price and compensation for construction, erection, and completion of the Work hereinabove agreed to be performed by the Contractor, the following price:

_____ Dollars

(\$ _____),

in lawful money of the United States, which sum is to be paid according to the schedule provided by the Contractor and accepted by the District and subject to

additions and deductions as provided in the Contract. This amount supersedes any previously stated and/or agreed to amount(s).

- 17. Severability:** If any term, covenant, condition, or provision in any of the Contract Documents is held by a court of competent jurisdiction to be invalid, void or unenforceable, the remainder of the provisions in the Contract Documents shall remain in full force and effect and shall in no way be affected, impaired, or invalidated thereby.

IN WITNESS WHEREOF, accepted and agreed on the date indicated above:

CONTRACTOR

_____ **DISTRICT**

By: _____

By: _____

Title: _____

Title: _____

NOTE: If the party executing this Contract is a corporation, a certified copy of the by-laws, or of the resolution of the Board of Directors, authorizing the officers of said corporation to execute the Contract and the bonds required thereby must be attached hereto.

END OF DOCUMENT

NOTICE TO PROCEED

Dated: _____, 20__

TO: _____
("Contractor")

ADDRESS: _____

PROJECT: Lakewood Elementary School Roofing

PROJECT/CONTRACT NO.: 0921-8221; 8150-5830-4 between the Lodi Unified School District and Contractor ("Contract").

You are notified that the Contract Time under the above Contract will commence to run on _____, 20__. By that date, you are to start performing your obligations under the Contract Documents. In accordance with the Agreement executed by Contractor, the date of completion is _____, 20__. **[ENSURE THIS PARAGRAPH IS CONSISTENT WITH §4 OF DOCUMENT 00 54 13 (AGREEMENT)]**

You must submit the following documents by 5:00 p.m. of the (TENTH (10th) calendar day following the date of this Notice to Proceed:

- a. Contractor's preliminary schedule of construction.
- b. Contractor's preliminary schedule of values for all of the Work.
- c. Contractor's preliminary schedule of submittals, including Shop Drawings, Product Data, and Samples submittals
- d. Contractor's Safety Plan specifically adapted for the Project.
- e. A complete subcontractors list, including the name, address, telephone number, facsimile number, California State Contractors License number, classification, and monetary value of all Subcontracts.

Thank you. We look forward to a very successful Project.

_____ SCHOOL DISTRICT

BY: _____

NAME: _____

TITLE: _____

END OF DOCUMENT

ESCROW BID DOCUMENTATION

1. Requirement to Escrow Bid Documentation

- a. Contractor shall submit, within **SEVEN (7)** calendar days after the date of the Notice of Award, one copy of all documentary information received or generated by Contractor in preparation of bid prices for this Contract, as specified herein. This material is referred to herein as "Escrow Bid Documentation." The Escrow Bid Documentation of the Contractor will be held in escrow for the duration of the Contract.
- b. Contractor agrees, as a condition of award of the Contract, that the Escrow Bid Documentation constitutes all written information used in the preparation of its bid, and that no other written bid preparation information shall be considered in resolving disputes or claims. Contractor also agrees that nothing in the Escrow Bid Documentation shall change or modify the terms or conditions of the Contract Documents.
- c. The Escrow Bid Documentation will not be opened by District except as indicated herein. The Escrow Bid Documentation will be used only for the resolution of change orders and claims disputes.
- d. Contractor's submission of the Escrow Bid Documentation, as with the bonds and insurance documents required, is considered an essential part of the Contract award. Should the Contractor fail to make the submission within the allowed time specified above, District may deem the Contractor to have failed to enter into the Contract, and the Contractor shall forfeit the amount of its bid security, accompanying the Contractor's bid, and District may award the Contract to the next lowest responsive responsible bidder.
- e. NO PAYMENTS WILL BE MADE, NOR WILL DISTRICT ACCEPT PROPOSED CHANGE ORDERS UNTIL THE ABOVE REQUIRED INFORMATION IS SUBMITTED AND APPROVED.
- f. The Escrow Bid Documentation shall be submitted in person by an authorized representative of the Contractor to the District.

2. Ownership of Escrow Bid Documentation

- a. The Escrow Bid Documentation is, and shall always remain, the property of Contractor, subject to review by District, as provided herein.
- b. Escrow Bid Documentation constitute trade secrets, not known outside Contractor's business, known only to a limited extent and only by a limited number of employees of Contractor, safeguarded while in Contractor's possession, extremely valuable to Contractor, and could be extremely valuable to Contractor's competitors by virtue of it reflecting Contractor's contemplated techniques of construction. Subject to the provisions herein, District agrees to safeguard the Escrow Bid Documentation, and all

information contained therein, against disclosure to the fullest extent permitted by law.

3. Format and Contents of Escrow Bid Documentation

- a. Contractor may submit Escrow Bid Documentation in its usual cost-estimating format; a standard format is not required. The Escrow Bid Documentation shall be submitted in the language (e.g., English) of the specification.
- b. Escrow Bid Documentation must clearly itemize the estimated costs of performing the work of each bid item contained in the bid schedule, separating bid items into sub-items as required to present a detailed cost estimate and allow a detailed cost review. The Escrow Bid Documentation shall include all subcontractor bids or quotes, supplier bids or quotes, quantity takeoffs, crews, equipment, calculations of rates of production and progress, copies of quotes from subcontractors and suppliers, and memoranda, narratives, add/deduct sheets, and all other information used by the Contractor to arrive at the prices contained in the bid proposal. Estimated costs should be broken down into Contractor's usual estimate categories such as direct labor, repair labor, equipment ownership and operation, expendable materials, permanent materials, and subcontract costs as appropriate. Plant and equipment and indirect costs should be detailed in the Contractor's usual format. The Contractor's allocation of indirect costs, contingencies, markup, and other items to each bid item shall be identified.
- c. All costs shall be identified. For bid items amounting to less than \$10,000, estimated unit costs are acceptable without a detailed cost estimate, provided that labor, equipment, materials, and subcontracts, as applicable, are included and provided that indirect costs, contingencies, and markup, as applicable, are allocated.
- d. Bid Documentation provided by District should not be included in the Escrow Bid Documentation unless needed to comply with the following requirements.

4. Submittal of Escrow Bid Documentation

- a. The Escrow Bid Documentation shall be submitted by the Contractor in a sealed container within **SEVEN (7)** calendar days after the date of the Notice of Award. The container shall be clearly marked on the outside with the Contractor's name, date of submittal, project name and the words "Escrow Bid Documentation – Intended to be opened in the presence of Authorized Representatives of Both District and Contractor".
- b. By submitting Escrow Bid Documentation, Contractor represents that the material in the Escrow Bid Documentation constitutes all the documentary information used in preparation of the bid and that the Contractor has personally examined the contents of the Escrow Bid Documentation container and has found that the documents in the container are complete.

- c. If Contractor's proposal is based upon subcontracting any part of the work, each subcontractor whose total subcontract price exceeds 5 percent of the total contract price proposed by Contractor, shall provide separate Escrow Documents to be included with those of Contractor. Those documents shall be opened and examined in the same manner and at the same time as the examination described above for Contractor.
- d. If Contractor wishes to subcontract any portion of the Work after award, District retains the right to require Contractor to submit Escrow Documents for the Subcontractor before the subcontract is approved.

5. Storage, Examination and Final Disposition of Escrow Bid Documentation

- a. The Escrow Bid Documentation will be placed in escrow, for the life of the Contract, in a mutually agreeable institution. The cost of storage will be paid by Contractor for the duration of the project until final Contract payment. The storage facilities shall be the appropriate size for all the Escrow Bid Documentation and located conveniently to both District's and Contractor's offices.
- b. The Escrow Bid Documentation shall be examined by both District and Contractor, at any time deemed necessary by either District or Contractor, to assist in the negotiation of price adjustments and change orders or the settlement of disputes and claims. In the case of legal proceedings, Escrow Bid Documentation shall be used subject to the terms of an appropriate protective order if requested by Contractor and ordered by a court of competent jurisdiction. Examination of the Escrow Bid Documentation is subject to the following conditions:
 - (1) As trade secrets, the Escrow Bid Documentation is proprietary and confidential to the extent allowed by law.
 - (2) District and Contractor shall each designate, in writing to the other party **SEVEN (7)** calendar days prior to any examination, the names of representatives who are authorized to examine the Escrow Bid Documentation. No other person shall have access to the Escrow Bid Documentation.
 - (3) Access to the documents may take place only in the presence of duly designated representatives of the District and Contractor. If Contractor fails to designate a representative or appear for joint examination on **SEVEN (7)** calendar days notice, then the District representative may examine the Escrow Bid Documents alone upon an additional **THREE (3)** calendar days notice if a representative of the Contractor does not appear at the time set.
 - (4) If a subcontractor has submitted sealed information to be included in the Escrow Bid Documents, access to those documents may take place only in the presence of a duly designated representative of the District, Contractor and that subcontractor. If that subcontractor fails to designate a representative or appear for joint examination on **SEVEN (7)** calendar days notice, then the District representative and/or the

Contractor may examine the Escrow Bid Documentation without that subcontractor present upon an additional **THREE (3)** calendar days notice if a representative of that subcontractor does not appear at the time set.

- c. The Escrow Bid Documentation will be returned to Contractor at such time as the Contract has been completed and final settlement has been achieved.

END OF DOCUMENT

ESCROW AGREEMENT IN LIEU OF RETENTION
Public Contract Code Section 22300

(Note: Contractor must use this form.)

This Escrow Agreement ("Escrow Agreement") is made and entered into this _____ day of _____, 20____, by and between the _____ School District ("District"), whose address is _____, California, and _____ ("Contractor"), whose address is _____, and _____ ("Escrow Agent"), a state or federally chartered bank in the state of California, whose address is _____

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 following two (2) options:
 - ☐ Deposit securities with Escrow Agent as a substitute for retention earnings required to be withheld by District pursuant to the Construction Contract No. 0921-8221; 8150-5830-4 entered into between District and _____ Contractor for the _____ Project, in the amount of _____ Dollars (\$_____) dated, _____, 20____, (the "Contract"); **or**
 - ☐ On written request of Contractor, District shall make payments of the retention earnings for the above referenced Contract directly to Escrow Agent.

When Contractor deposits the securities as a substitute for Contract earnings (first option), 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 _____ School 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 District pays Escrow Agent directly.

4. Contractor shall be responsible for paying all fees for the expenses incurred by Escrow Agent in administering the Escrow Account, and all expenses of District. The District will charge Contractor \$_____ for each of District's deposits to the escrow account. 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 and/or withdraw amounts from the Escrow Account in the event of default by Contractor. Upon seven (7) days' written notice to Escrow Agent from District of the default, if applicable, 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 that 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 to 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:

Title

Name

Signature

Address

On behalf of Contractor:

Title

Name

Signature

Address

On behalf of Escrow Agent:

Title

Name

Signature

Address

At the time that the Escrow Account is opened, District and Contractor shall deliver to Escrow Agent a fully executed copy 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:

Title

Name

Signature

Address

On behalf of Contractor:

Title

Name

Signature

Address

END OF DOCUMENT

PERFORMANCE BOND
(100% of Contract Price)

(Note: Contractor must use this form, NOT a surety company form.)

KNOW ALL PERSONS BY THESE PRESENTS:

WHEREAS, the board of education ("Board") of the Lodi Unified School District, ("District") and _____ ("Principal") have entered into a contract for the furnishing of all materials and labor, services and transportation, necessary, convenient, and proper to perform the following project:

_____ (Project Name)

("Project" or "Contract") which Contract dated _____, 20____, and all of the Contract Documents attached to or forming a part of the Contract, are hereby referred to and made a part hereof; and

WHEREAS, said Principal is required under the terms of the Contract to furnish a bond for the faithful performance of the Contract.

NOW, THEREFORE, the Principal and _____ ("Surety") are held and firmly bound unto the Board of the District in the penal sum of

Dollars (\$_____), lawful money of the United States, for the payment of which sum well and truly to be made we bind ourselves, our heirs, executors, administrators, successors, and assigns jointly and severally, firmly by these presents, to:

- Perform all the work required to complete the Project; and
- Pay to the District all damages the District incurs as a result of the Principal's failure to perform all the Work required to complete the Project.

The condition of the obligation is such that, if the above bounden Principal, his or its heirs, executors, administrators, successors, or assigns, shall in all things stand to and abide by, and well and truly keep and perform the covenants, conditions, and agreements in the Contract and any alteration thereof made as therein provided, on his or its part to be kept and performed at the time and in the intent and meaning, including all contractual guarantees and warranties of materials and workmanship, and shall indemnify and save harmless the District, its trustees, officers and agents, as therein stipulated, then this obligation shall become null and void, otherwise it shall be and remain in full force and virtue.

Surety expressly agrees that the District may reject any contractor or subcontractor proposed by Surety to fulfill its obligations in the event of default by the Principal. Surety shall not utilize Principal in completing the Work nor shall Surety accept a Bid from Principal for completion of the Work if the District declares the Principal to be in default and notifies

Surety of the District's objection to Principal's further participation in the completion of the Work.

As a condition precedent to the satisfactory completion of the Contract, the above obligation shall hold good for a period equal to the warranty and/or guarantee period of the Contract, during which time Surety's obligation shall continue if Contractor shall fail to make full, complete, and satisfactory repair and replacements and totally protect the District from loss or damage resulting from or caused by defective materials or faulty workmanship. The obligations of Surety hereunder shall continue so long as any obligation of Contractor remains. Nothing herein shall limit the District's rights or the Contractor or Surety's obligations under the Contract, law or equity, including, but not limited to, California Code of Civil Procedure section 337.15.

The Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration, or addition to the terms of the contract or to the work to be performed thereunder or the specifications accompanying the same shall in any way affect its obligation on this bond, and it does hereby waive notice of any such change, extension of time, alteration, or addition to the terms of the Contract or to the work or to the specifications.

IN WITNESS WHEREOF, two (2) identical counterparts of this instrument, each of which shall for all purposes be deemed an original thereof, have been duly executed by the Principal and Surety above named, on the _____ day of _____, 20____.

(Affix Corporate Seal)

Principal

By

Surety

By

Name of California Agent of Surety

Address of California Agent of Surety

Telephone No. of California Agent of Surety

Contractor must attach a Notarial Acknowledgment for all Surety's signatures and a Power of Attorney and Certificate of Authority for Surety. The California Department of Insurance must authorize the Surety to be an admitted surety insurer.

END OF DOCUMENT

PAYMENT BOND
Contractor's Labor & Material Bond
(100% Of Contract Price)

(Note: Contractor must use this form, NOT a surety company form.)

KNOW ALL PERSONS BY THESE PRESENTS:

WHEREAS, the board of education ("Board") of the Lodi Unified School District, (or "District") and _____, ("Principal") have entered into a contract for the furnishing of all materials and labor, services and transportation, necessary, convenient, and proper to perform the following project:

_____ (Project Name)
("Project" or "Contract") which Contract dated _____, 20____, and all of the Contract Documents attached to or forming a part of the Contract, are hereby referred to and made a part hereof; and

WHEREAS, pursuant to law and the Contract, the Principal is required, before entering upon the performance of the work, to file a good and sufficient bond with the body by which the Contract is awarded in an amount equal to one hundred percent (100%) of the Contract price, to secure the claims to which reference is made in sections 9000 through 9510 and 9550 through 9566 of the Civil Code, and division 2, part 7, of the Labor Code.

NOW, THEREFORE, the Principal and _____ ("Surety") are held and firmly bound unto all laborers, material men, and other persons referred to in said statutes in the sum of _____ Dollars (\$_____), lawful money of the United States, being a sum not less than the total amount payable by the terms of Contract, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors, or assigns, jointly and severally, by these presents.

The condition of this obligation is that if the Principal or any of his or its subcontractors, of the heirs, executors, administrators, successors, or assigns of any, all, or either of them shall fail to pay for any labor, materials, provisions, provender, 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 required to be deducted, withheld, and paid over to the Employment Development Department from the wages of employees of the Principal or any of his or its subcontractors of any tier under Section 13020 of the Unemployment Insurance Code with respect to such work or labor, that the Surety will pay the same in an amount not exceeding the amount herein above set forth, and also in case suit is brought upon this bond, will pay a reasonable attorney's fee to be awarded and fixed by the Court, and to be taxed as costs and to be included in the judgment therein rendered.

It is hereby expressly stipulated and agreed that this bond shall inure to the benefit of any and all persons, companies, and corporations entitled to file claims under section 9100 of the Civil Code, so as to give a right of action to them or their assigns in any suit brought upon this bond.

Should the condition of this bond be fully performed, then this obligation shall become null and void; otherwise it shall be and remain in full force and affect.

And the Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration, or addition to the terms of Contract or the specifications accompanying the same shall in any manner affect its obligations on this bond, and it does hereby waive notice of any such change, extension, alteration, or addition.

IN WITNESS WHEREOF, two (2) identical counterparts of this instrument, each of which shall for all purposes be deemed an original thereof, have been duly executed by the Principal and Surety above named, on the _____ day of _____, 20____.

(Affix Corporate Seal)

Principal

By

Surety

By

Name of California Agent of Surety

Address of California Agent of Surety

Telephone No. of California Agent of Surety

Contractor must attach a Notarial Acknowledgment for all Surety's signatures and a Power of Attorney and Certificate of Authority for Surety. The California Department of Insurance must authorize the Surety to be an admitted surety insurer.

END OF DOCUMENT

ALLOWANCE EXPENDITURE DIRECTIVE FORM

Lodi Unified School District
 1305 E. Vine Street
 Lodi, CA 95240

**ALLOWANCE
 EXPENDITURE
 DIRECTIVE NO.:**

ALLOWANCE EXPENDITURE DIRECTIVE

Project: _____

Date: _____

Bid No.: _____

DSA File No.: _____

DSA Appl. No.: _____

The following parties agree to the terms of this Allowance Expenditure Directive ("AED"):

Owner Name, Address, Telephone:

Contractor Name, Address, Telephone:

Reference	Description	Allowance Authorized for Expenditure	Days Ext.
Request for AED # Requested by: Performed by: Reason:	[Description of unforeseen item relating to Work] [Requester] [Performer] [Reason]	\$	
Request for AED # Requested by: Performed by: Reason:	[Description of unforeseen item relating to Work] [Requester] [Performer] [Reason]	\$	
Request for AED # Requested by: Performed by: Reason:	[Description of unforeseen item relating to Work] [Requester] [Performer] [Reason]	\$	

Contract time will be adjusted as follows:	Total Contract Allowance Amount:	\$
Previous Completion Date: __[DATE]__	Amount of Previously Approved Allowance Expenditure Directive(s):	\$

_____ [#] _____ Calendar Days Extension (zero days unless otherwise indicated) Current Completion Date: ____ [DATE] ____	Amount of this Allowance Expenditure Directive:	\$
--	--	----

The undersigned Contractor approves the foregoing release of allowance for completion of each specified item, and as to the extension of time allowed, if any, for completion of the entire work as stated therein, and agrees to furnish all labor, materials and services and perform all work necessary to complete any additional work specified for the consideration stated therein ("Work"). Submission of sums which have no basis in fact or which Contractor knows are false are at the sole risk of Contractor and may be a violation of the False Claims Act set forth under Government Code section 12650, et seq.

This Allowance Expenditure Directive must be signed by an authorized District representative.

It is expressly understood that the authorized allowance expenditure and time, if any, granted herein represent a full accord and satisfaction for any and all time and cost impacts of the items herein, and Contractor waives any and all further compensation or time extension based on the items herein. The value of the extra work or changes expressly includes any and all of the Contractor's costs and expenses, and its subcontractors, 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.

Signatures:

DISTRICT: LODI UNIFIED SCHOOL DISTRICT Date: _____ By: _____ [Print Name and Title here]	CONTRACTOR: _____ Date: _____ By: _____ [Print Name and Title here]
ARCHITECT: _____ Date: _____ By: _____ [Print Name and Title here]	PROJECT INSPECTOR: _____ Date: _____ By: _____ [Print Name and Title here]

END OF DOCUMENT

CHANGE ORDER FORM

[School District]
[Address]

CHANGE ORDER NO.:

CHANGE ORDER

Project:
Bid No.:

Date:
DSA File No.:
DSA Appl. No.:

The following parties agree to the terms of this Change Order:

Owner:

[Name / Address]

Contractor:

[Name / Address]

Architect:

[Name / Address]

Project Inspector:

[Name / Address]

Reference	Description	Cost	Days Ext.
PCO # Requested by: Performed by: Reason:	[Description of change] [Requester] [Performer] [Reason]	\$	
PCO # Requested by: Performed by: Reason:	[Description of change] [Requester] [Performer] [Reason]	\$	
PCO # Requested by: Performed by: Reason:	[Description of change] [Requester] [Performer] [Reason]	\$	
Contract time will be adjusted as follows:		Original Contract Amount:	\$
Previous Completion Date: __[Date]		Amount of Previously Approved Change Order(s):	\$
_____[#] Calendar Days Extension (zero unless otherwise indicated)		Amount of this Change Order:	\$
Current Completion Date: __[Date]		Contract Amount:	\$

The undersigned Contractor approves the foregoing as to the changes, if any, to the Contract Price specified for each item, and as to the extension of time allowed, if any, for completion of the entire work as stated therein, and agrees to furnish all labor, materials and services and perform all work necessary to complete any additional work specified for the consideration stated therein. Submission of sums which have no basis in fact or which Contractor knows are false are at the sole risk of Contractor and may be a violation of the False Claims Act set forth under Government Code section 12650, *et seq.*

This change order is subject to approval by the governing board of this District and must be signed by the District. Until such time as this change order is approved by the District's governing board and executed by a duly authorized District representative, this change order is not effective and not binding.

It is expressly understood that the compensation and time, if any, granted herein represent a full accord and satisfaction for any and all time and cost impacts of the items herein, and Contractor waives any and all further compensation or time extension based on the items herein. The value of the extra work or changes expressly includes any and all of the Contractor's costs and expenses, both direct and indirect, resulting from additional time required on the project or resulting from delay to the project. Any costs, expenses, damages or time extensions not included are deemed waived.

Signatures:

District:

Contractor:

[Name]

Date

[Name]

Date

Architect:

Project Inspector:

[Name]

Date

[Name]

Date

END OF DOCUMENT

AGREEMENT AND RELEASE OF ANY AND ALL CLAIMS

THIS AGREEMENT AND RELEASE OF CLAIMS ("Agreement and Release") IS MADE AND ENTERED INTO THIS _____ DAY OF _____, 20____ by and between the _____ SCHOOL DISTRICT ("District") and _____ ("Contractor"), whose place of business is _____.

RECITALS:

1. District and Contractor entered into PROJECT/CONTRACT NO.: _____ ("Contract" or "Project") in the County of _____, California.
2. The Work under the Contract was completed on _____, and a Notice of Completion was recorded with the County Recorder on _____.

NOW, THEREFORE, it is mutually agreed between District and Contractor as follows:

AGREEMENT

3. Contractor will only be assessed liquidated damages as detailed below:

Original Contract Sum	\$ _____
Modified Contract Sum	\$ _____
Payment to Date	\$ _____
Liquidated Damages	\$ _____
Payment Due Contractor	\$ _____
4. Subject to the provisions hereof, District shall forthwith pay to Contractor the undisputed sum of _____ Dollars (\$ _____) under the Contract, less any amounts represented by any notice to withhold funds on file with District as of the date of such payment.
5. Contractor acknowledges and hereby agrees that there are no unresolved or outstanding claims in dispute against District arising from the performance of work under the Contract, except for the claims described in Paragraph 6 and continuing obligations described in Paragraph 8. It is the intention of the parties in executing this Agreement and Release that this Agreement and Release shall be effective as a full, final and general release of all claims, demands, actions, causes of action, obligations, costs, expenses, damages, losses and liabilities of Contractor against District and all of its respective agents, employees, trustees, inspectors, assignees, consultants and transferees, except for any Disputed Claim that may be set forth in Paragraph 6 and the continuing obligations described in Paragraph 8 hereof.

6. The following claims are disputed (hereinafter, the "Disputed Claims") and are specifically excluded from the operation of this Agreement and Release:

<u>Claim No.</u>	<u>Description of Claim</u>	<u>Amount of Claim</u>	<u>Date Claim Submitted</u>
_____	_____	\$ _____	_____
_____	_____	\$ _____	_____
_____	_____	\$ _____	_____
_____	_____	\$ _____	_____

[If further space is required, attach additional sheets showing the required information.]

7. Consistent with California Public Contract Code section 7100, Contractor hereby agrees that, in consideration of the payment set forth in Paragraph 4 hereof, Contractor hereby releases and forever discharges District, all its agents, employees, inspectors, assignees, and transferees from any and all liability, claims, demands, actions, or causes of action of whatever kind or nature arising out of or in any way concerned with the Work under the Contract.
8. Guarantees and warranties for the Work, and any other continuing obligation of Contractor, shall remain in full force and effect as specified in the Contract Documents.
9. To the furthest extent permitted by California law, Contractor shall defend, indemnify, and hold harmless the District, its agents, representatives, officers, consultants, employees, trustees, and volunteers (the "indemnified parties") from any and all losses, liabilities, claims, suits, and actions of any kind, nature, and description, including, but not limited to, attorneys' fees and costs, directly or indirectly arising out of, connected with, or resulting from the performance of the Contract unless caused wholly by the sole negligence or willful misconduct of the District.
10. Contractor hereby waives the provisions of 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 OR HER FAVOR AT THE TIME OF EXECUTING THE RELEASE, WHICH IF KNOWN BY HIM OR HER MUST HAVE MATERIALLY AFFECTED HIS OR HER SETTLEMENT WITH THE DEBTOR.

11. The provisions of this Agreement and Release are contractual in nature and not mere recitals and shall be considered independent and severable. If any such provision or any part thereof shall be at any time held invalid in whole or in part under any federal, state, county, municipal, or other law, ruling, or regulations, then such provision, or part thereof, shall remain in force and effect to the extent permitted by law, and the remaining provisions of this Agreement and Release shall also remain in full force and effect, and shall be enforceable.

12. All rights of District shall survive completion of the Work or termination of Contract, and execution of this Release.

* * * CAUTION: THIS IS A RELEASE - READ BEFORE EXECUTING * * *

SCHOOL DISTRICT

Signature: _____

Print Name: _____

Title: _____

CONTRACTOR: _____

Signature: _____

Print Name: _____

Title: _____

END OF DOCUMENT

GUARANTEE FORM

_____ ("Contractor") hereby agrees that the _____
_____ ("Work" of Contractor) which Contractor has installed for the Lodi Unified
School District ("District") for the following project:

PROJECT NO: 0921-8221; 8150-5830-4 PROJECT: Lakewood Elementary School Roofing

("Project" or "Contract") 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 that may be
displaced in connection with such replacement within a period of **TWO (2)** year(s) from the
date of completion as defined in Public Contract Code section 7107, subdivision (c), ordinary
wear and tear and unusual abuse or neglect excepted. The date of completion is
_____, 20____.

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 seven
(7) days 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. The undersigned shall pay the costs and charges therefor upon demand.

Date: _____

Proper Name of Contractor: _____

Signature: _____

Print Name: _____

Title: _____

Representatives to be contacted for service subject to terms of Contract:

Name: _____

Address: _____

Phone NO.: _____

END OF DOCUMENT



PART 2: GENERAL CONDITIONS

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GENERAL CONDITIONS

1. CONTRACT TERMS AND DEFINITIONS

1.1 Definitions

Wherever used in the Contract Documents, the following terms shall have the meanings indicated, which shall be applicable to both the singular and plural thereof:

1.1.1 Adverse Weather: Shall be only weather that satisfies all of the following conditions: (1) unusually severe precipitation, sleet, snow, hail, or extreme temperature conditions in excess of the norm for the location and time of year it occurred based on the closest weather station data averaged over the past five years, (2) that is unanticipated and would cause unsafe work conditions and/or is unsuitable for scheduled work that should not be performed during inclement weather (i.e., exterior finishes), and (3) at the Project.

1.1.2 Approval, Approved, and/or Accepted: Refer to written authorization, unless stated otherwise.

1.1.3 Architect: The individual, partnership, corporation, joint venture, or any combination thereof, named as Architect, who will have the rights and authority assigned to the Architect in the Contract Documents. The term Architect means the Design Professional in General Responsible Charge as defined in DSA PR 13-02 on this Project or the Architect's authorized representative.

1.1.4 As-Built Drawings: Unless otherwise defined in the Special Conditions, reproducible blue line prints of drawings to be prepared on a monthly basis pursuant to the Contract Documents, that reflect changes made during the performance of the Work, recording differences between the original design of the Work and the Work as constructed since the preceding monthly submittal.

1.1.5 Bidder: A contractor who intends to provide a proposal to the District to perform the Work of this Contract.

1.1.6 Change Order: A written order to the Contractor authorizing an addition to, deletion from, or revision in the Work, and/or authorizing an adjustment in the Contract Price or Contract Time.

1.1.7 Claim: A Dispute that remains unresolved at the conclusion of the all the applicable Dispute Resolution requirements provided herein.

1.1.8 Construction Change Directive: A written order prepared and issued by the District, the Construction Manager, and/or the Architect and signed by the District and the Architect, directing a change in the Work.

1.1.9 Construction Manager: The individual, partnership, corporation, joint venture, or any combination thereof, or its authorized representative, named as such by the District. If no Construction Manager is used on the Project that is the subject

of this Contract, then all references to Construction Manager herein shall be read to refer to District.

1.1.10 Construction Schedule: The progress schedule of construction of the Project as provided by Contractor and approved by District.

1.1.11 Contract, Contract Documents: The Contract consists exclusively of the documents evidencing the agreement of the District and Contractor, identified as the Contract Documents. The Contract Documents consist of the following documents:

- 1.1.11.1 Notice to Bidders
- 1.1.11.2 Instructions to Bidders
- 1.1.11.3 Bid Form and Proposal
- 1.1.11.4 Bid Bond
- 1.1.11.5 Designated Subcontractors List
- 1.1.11.6 Site-Visit Certification (if a site visit was required)
- 1.1.11.7 Noncollusion Declaration
- 1.1.11.8 Notice of Award
- 1.1.11.9 Notice to Proceed
- 1.1.11.10 Agreement
- 1.1.11.11 Escrow of Bid Documentation
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- 1.1.11.13 Performance Bond
- 1.1.11.14 Payment Bond (Contractor's Labor & Material Bond)
- 1.1.11.15 General Conditions
- 1.1.11.16 Special Conditions (if applicable)
- 1.1.11.17 Project Labor Agreement (if applicable)
- 1.1.11.18 Hazardous Materials Procedures and Requirements
- 1.1.11.19 Workers' Compensation Certification
- 1.1.11.20 Prevailing Wage Certification
- 1.1.11.21 Disabled Veterans Business Enterprise Participation Certification (if applicable)
- 1.1.11.22 Drug-Free Workplace Certification (if applicable)
- 1.1.11.23 Tobacco-Free Environment Certification
- 1.1.11.24 Hazardous Materials Certification (if applicable)
- 1.1.11.25 Lead-Based Paint Certification (if applicable)
- 1.1.11.26 Imported Materials Certification (if applicable)
- 1.1.11.27 Criminal Background Investigation/Fingerprinting Certification
- 1.1.11.28 Buy American Certification (if applicable)
- 1.1.11.29 Roofing Project Certification (if applicable)
- 1.1.11.30 Iran Contracting Act Certification (if applicable)
- 1.1.11.31 Post Bid Interview
- 1.1.11.32 All Plans, Technical Specifications, and Drawings
- 1.1.11.33 Any and all addenda to any of the above documents
- 1.1.11.34 Any and all change orders or written modifications to the above documents if approved in writing by the District

1.1.12 Contract Price: The total monies payable to the Contractor under the terms and conditions of the Contract Documents.

1.1.13 Contract Time: The time period stated in the Agreement for the completion of the Work.

1.1.14 Contractor: The person or persons identified in the Agreement as contracting to perform the Work to be done under this Contract, or the legal representative of such a person or persons.

1.1.15 Daily Job Report(s): Daily Project reports prepared by the Contractor's employee(s) who are present on Site, which shall include the information required herein.

1.1.16 Day(s): Unless otherwise designated, day(s) means calendar day(s).

1.1.17 Department of Industrial Relations (or "DIR"): is responsible, among other things, for labor compliance monitoring and enforcement of California prevailing wage laws and regulations for public works contracts.

1.1.18 Dispute: A separate demand by Contractor for a time extension, or payment of money or damages arising from Work done by or on behalf of the Contractor pursuant to the Contract and payment of which is not otherwise expressly provided for or Contractor is not otherwise entitled to; or an amount of payment disputed by the District.

1.1.19 District: The public agency or the school district for which the Work is performed. The governing board of the District or its designees will act for the District in all matters pertaining to the Contract. The District may, at any time,

1.1.19.1 Direct the Contractor to communicate with or provide notice to the Construction Manager or the Architect on matters for which the Contract Documents indicate the Contractor will communicate with or provide notice to the District; and/or

1.1.19.2 Direct the Construction Manager or the Architect to communicate with or direct the Contractor on matters for which the Contract Documents indicate the District will communicate with or direct the Contractor.

1.1.20 Drawings (or "Plans"): The graphic and pictorial portions of the Contract Documents showing the design, location, scope and dimensions of the work, generally including plans, elevations, sections, details, schedules, sequence of operation, and diagrams.

1.1.21 DSA: Division of the State Architect.

1.1.22 Force Account Directive: A process that may be used when the District and the Contractor cannot agree on a price for a specific portion of work or before the Contractor prepares a prices for a specific portion of work and whereby the Contractor performs the work as indicated herein on a time and materials basis.

1.1.23 Job Cost Reports: Any and all reports or records detailing the costs associated with work performed on or related to the Project that Contractor shall maintain for the Project. Specifically, Job Cost Reports shall contain, but are not limited by or to, the following information: a description of the work performed or to be performed on the Project; quantity, if applicable, of work performed (hours,

square feet, cubic yards, pounds, etc.) for the Project; Project budget; costs for the Project to date; estimated costs to complete the Project; and expected costs at completion. The Job Cost Reports shall also reflect all Contract cost codes, change orders, elements of non-conforming work, back charges, and additional services.

1.1.24 Labor Commissioner's Office (or "Labor Commissioner", also known as the Division of Labor Standards Enforcement ("DLSE")): Division of the DIR responsible for adjudicating wage claims, investigating discrimination and public works complaints, and enforcing Labor Code statutes and Industrial Welfare Commission orders.

1.1.25 Municipal Separate Storm Sewer System (or "MS4"): A system of conveyances used to collect and/or convey storm water, including, without limitation, catch basins, curbs, gutters, ditches, man-made channels, and storm drains.

1.1.26 Premises: The real property owned by the District on which the Site is located.

1.1.27 Product(s): New material, machinery, components, equipment, fixtures and systems forming the Work, including existing materials or components required and approved by the District for reuse.

1.1.28 Product Data: Illustrations, standard schedules, performance charts, instructions, brochures, diagrams, and other information furnished by the Contractor to illustrate a material, product, or system for some portion of the Work.

1.1.29 Project: The planned undertaking as provided for in the Contract Documents.

1.1.30 Project Inspector (or "Inspector"): The individual(s) retained by the District in accordance with title 24 of the California Code of Regulations to monitor and inspect the Project.

1.1.31 Project Labor Agreement (or "PLA"): a prehire collective bargaining agreement in accordance with Public Contract Code section 2500 *et seq.* that establishes terms and conditions of employment for a specific construction project or projects and/or is an agreement described in Section 158(f) of Title 29 of the United States Code.

1.1.32 Program Manager: The individual, partnership, corporation, joint venture, or any combination thereof, or its authorized representative, named as such by the District. If no Program Manager is designated for Project that is the subject of this Contract, then all references to Project Manager herein shall be read to refer to District.

1.1.33 Provide: Shall include "provide complete in place," that is, "furnish and install," and "provide complete and functioning as intended in place" unless specifically stated otherwise.

1.1.34 Qualified SWPPP Practitioners (or "QSP"): certified personnel that attended a State Water Resources Control Board sponsored or approved training class and passed the qualifying exam.

1.1.35 Record Drawings: Unless otherwise defined in the Special Conditions, Reproducible drawings (or Plans) prepared pursuant to the requirements of the Contract Documents, that reflect all changes made during the performance of the Work, recording differences between the original design of the Work and the Work as constructed upon completion of the Project.

1.1.36 Request for Information (or "RFI"): A written request prepared by the Contractor requesting that the Architect provide additional information necessary to clarify or amplify an item in the Contract Documents that the Contractor believes is not clearly shown or called for in the Drawings or Specifications or other portions of the Contract Documents, or to address problems that have arisen under field conditions.

1.1.37 Request for Substitution for Specified Item: A request by Contractor to substitute an equal or superior material, product, thing, or service for a specific material, product, thing, or service that has been designated in the Contract Documents by a specific brand or trade name.

1.1.38 Safety Orders: Written and/or verbal orders for construction issued by the California Division of Industrial Safety ("CalOSHA") or by the United States Occupational Safety and Health Administration ("OSHA").

1.1.39 Safety Plan: Contractor's safety plan specifically adapted for the Project. Contractor's Safety Plan shall comply with all provisions regarding Project safety, including all applicable provisions in these General Conditions.

1.1.40 Samples: Physical examples that illustrate materials, products, equipment, finishes, colors, or workmanship and that, when approved in accordance with the Contract Documents, establish standards by which portions of the Work will be judged.

1.1.41 Shop Drawings: All drawings, prints, diagrams, illustrations, brochures, schedules, and other data that are prepared by the Contractor, a subcontractor, manufacturer, supplier, or distributor, that illustrate how specific portions of the Work shall be fabricated or installed.

1.1.42 Site: The Project site as shown on the Drawings.

1.1.43 Specifications: That portion of the Contract Documents, Division 1 through Division 17, and all technical sections, and addenda to all of these, if any, consisting of written descriptions and requirements of a technical nature of materials, equipment, construction methods and systems, standards, and workmanship.

1.1.44 State: The State of California.

1.1.45 Storm Water Pollution Prevention Plan (or "SWPPP"): A document which identifies sources and activities at a particular facility that may contribute pollutants to storm water and contains specific control measures and time frames to prevent or treat such pollutants.

1.1.46 Subcontractor: A contractor and/or supplier who is under contract with the Contractor or with any other subcontractor, regardless of tier, to perform a portion of the Work of the Project.

1.1.47 Submittal Schedule: The schedule of submittals as provided by Contractor and approved by District.

1.1.48 Surety: The person, firm, or corporation that executes as surety the Contractor's Performance Bond and Payment Bond, and must be a California admitted surety insurer as defined in the Code of Civil Procedure section 995.120.

1.1.49 Work: All labor, materials, equipment, components, appliances, supervision, coordination, and services required by, or reasonably inferred from, the Contract Documents, that are necessary for the construction and completion of the Project.

1.2 Laws Concerning the Contract

Contract is subject to all provisions of the Constitution and laws of California and the United States governing, controlling, or affecting District, or the property, funds, operations, or powers of District, and such provisions are by this reference made a part hereof. Any provision required by law to be included in this Contract shall be deemed to be inserted.

1.3 No Oral Agreements

No oral agreement or conversation with any officer, agent, or employee of District, either before or after execution of Contract, shall affect or modify any of the terms or obligations contained in any of the documents comprising the Contract.

1.4 No Assignment

Contractor shall not assign this Contract or any part thereof including, without limitation, any services or money to become due hereunder without the prior written consent of the District. Assignment without District's prior written consent shall be null and void. Any assignment of money due or to be come due under this Contract shall be subject to a prior lien for services rendered or material supplied for performance of work called for under this Contract in favor of all persons, firms, or corporations rendering services or supplying material to the extent that claims are filed pursuant to the Civil Code, Code of Civil Procedure, Government Code, Labor Code, and/or Public Contract Code, and shall also be subject to deductions for liquidated damages or withholding of payments as determined by District in accordance with this Contract. Contractor shall not assign or transfer in any manner to a Subcontractor or supplier the right to prosecute or maintain an action against the District.

1.5 Notice and Service Thereof

1.5.1 Any notice from one party to the other or otherwise under Contract shall be in writing and shall be dated and signed by the party giving notice or by a duly authorized representative of that party. Any notice shall not be effective for any purpose whatsoever unless served in one of the following manners:

1.5.1.1 If notice is given by personal delivery thereof, it shall be considered delivered on the day of delivery.

1.5.1.2 If notice is given by overnight delivery service, it shall be considered delivered on (1) day after date deposited, as indicated by the delivery service.

1.5.1.3 If notice is given by depositing same in United States mail, enclosed in a sealed envelope, it shall be considered delivered three (3) days after date deposited, as indicated by the postmarked date.

1.5.1.4 If notice is given by registered or certified mail with postage prepaid, return receipt requested, it shall be considered delivered on the day the notice is signed for.

1.6 No Waiver

The failure of District in any one or more instances to insist upon strict performance of any of the terms of this Contract or to exercise any option herein conferred shall not be construed as a waiver or relinquishment to any extent of the right to assert or rely upon any such terms or option on any future occasion. No action or failure to act by the District, Architect, or Construction Manager shall constitute a waiver of any right or duty afforded the District under the Contract, nor shall any action or failure to act constitute an approval of or acquiescence in any breach thereunder, except as may be specifically agreed in writing.

1.7 Substitutions for Specified Items

Unless the Special Conditions contain different provisions, Contractor shall not substitute different items for any items identified in the Contract Documents without prior written approval of the District.

1.8 Materials and Work

1.8.1 Except as otherwise specifically stated in this Contract, Contractor shall provide and pay for all materials, labor, tools, equipment, transportation, supervision, temporary constructions of every nature, and all other services, management, and facilities of every nature whatsoever necessary to execute and complete this Contract, in a good and workmanlike manner, within the Contract Time.

1.8.2 Unless otherwise specified, all materials shall be new and of the best quality of their respective kinds and grades as noted or specified, workmanship shall be of good quality, and Contractor shall use all diligence to inform itself fully as to the required manufacturer's instructions and to comply therewith.

1.8.3 Materials shall be furnished in ample quantities and at such times as to insure uninterrupted progress of Work and shall be stored properly and protected from the elements, theft, vandalism, or other loss or damage as required.

1.8.4 For all materials and equipment specified or indicated in the Drawings, the Contractor shall provide all labor, materials, equipment, and services necessary for complete assemblies and complete working systems, functioning as intended. Incidental items not indicated on 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 here 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.

1.8.5 Contractor shall, after award of Contract by District and after relevant submittals have been approved, place orders for materials and/or equipment as specified so that delivery of same may be made without delays to the Work. Contractor shall, upon demand from District, present documentary evidence showing that orders have been placed.

1.8.6 District reserves the right but has no obligation, in response to Contractor's neglect or failure in complying with the above instructions, to place orders for such materials and/or equipment as the District may deem advisable in order that the Work may be completed at the date specified in the Agreement, and all expenses incidental to the procuring of said materials and/or equipment shall be paid for by Contractor or deducted from payment(s) to Contractor.

1.8.7 Contractor warrants good title to all material, supplies, and equipment installed or incorporated in Work and agrees upon completion of all Work to deliver the Site to District, together with all improvements and appurtenances constructed or placed thereon by it, and free from any claims, liens, or charges. Contractor further agrees that neither it nor any person, firm, or corporation furnishing any materials or labor for any work covered by the Contract shall have any right to lien any portion of the Premises or any improvement or appurtenance thereon, except that Contractor may install metering devices or other equipment of utility companies or of political subdivision, title to which is commonly retained by utility company or political subdivision. In the event of installation of any such metering device or equipment, Contractor shall advise District as to owner thereof.

1.8.7.1 If a lien or a claim based on a stop payment notice of any nature should at any time be filed against the Work or any District property, by any entity that has supplied material or services at the request of the Contractor, Contractor and Contractor's Surety shall promptly, on demand by District and at Contractor's and Surety's own expense, take any and all action necessary to cause any such lien or a claim based on a stop payment notice to be released or discharged immediately therefrom.

1.8.7.2 If the Contractor fails to furnish to the District within ten (10) calendar days after demand by the District, satisfactory evidence that a lien or a claim based on a stop payment notice has been so released, discharged, or secured, the District may discharge such indebtedness and deduct the amount required therefor, together with any and all losses, costs, damages, and attorney's fees and expense incurred or suffered by District from any sum payable to Contractor under the Contract.

1.8.8 Nothing contained in this Article, however, shall defeat or impair the rights of persons furnishing materials or labor under any bond given by Contractor for their protection or any rights under any law permitting such protection or any rights under any law permitting such persons to look to funds due Contractor in hands of District (e.g., stop payment notices), and this provision shall be inserted in all subcontracts and material contracts and notice of its provisions shall be given to all persons furnishing material for work when no formal contract is entered into for such material.

1.8.9 Title to new materials and/or equipment for the Work of this Contract and attendant liability for its protection and safety shall remain with Contractor until incorporated in the Work of this Contract and accepted by District. No part of any

materials and/or equipment shall be removed from its place of storage except for immediate installation in the Work of this Contract. Should the District, in its discretion, allow the Contractor to store materials and/or equipment for the Work off-site, Contractor will store said materials and/or equipment at a bonded warehouse and with appropriate insurance coverage at no cost to District. Contractor shall keep an accurate inventory of all materials and/or equipment in a manner satisfactory to District or its authorized representative and shall, at the District's request, forward it to the District.

2. [RESERVED]

3. ARCHITECT

3.1 The Architect shall represent the District during the Project and will observe the progress and quality of the Work on behalf of the District. Architect shall have the authority to act on behalf of District to the extent expressly provided in the Contract Documents and to the extent determined by District. Architect shall have authority to reject materials, workmanship, and/or the Work whenever rejection may be necessary, in Architect's reasonable opinion, to insure the proper execution of the Contract.

3.2 Architect shall, with the District and on behalf of the District, determine the amount, quality, acceptability, and fitness of all parts of the Work, and interpret the Specifications, Drawings, and shall, with the District, interpret all other Contract Documents.

3.3 Architect shall have all authority and responsibility established by law, including title 24 of the California Code of Regulations.

3.4 Contractor shall provide District and the Construction Manager with a copy of all written communication between Contractor and Architect at the same time as that communication is made to Architect, including, without limitation, all RFIs, correspondence, submittals, claims, and proposed change orders.

4. CONSTRUCTION MANAGER

4.1 If a Construction Manager is used on this Project ("Construction Manager" or "CM"), the Construction Manager will provide administration of the Contract on the District's behalf. After execution of the Contract and Notice to Proceed, all correspondence and/or instructions from Contractor and/or District shall be forwarded through the Construction Manager. The Construction Manager will not be responsible for and will not have control or charge of construction means, methods, techniques, sequences, or procedures or for safety precautions in connection with the Work, which shall all remain the Contractor's responsibility.

4.2 The Construction Manager, however, will have authority to reject materials and/or workmanship not conforming to the Contract Documents, as determined by the District, the Architect, and/or the Project Inspector. The Construction Manager shall also have the authority to require special inspection or testing of any portion of the Work, whether it has been fabricated, installed, or fully completed. Any decision made by the Construction Manager, in good faith, shall not give rise to any duty or responsibility of the Construction Manager to: the Contractor; any Subcontractor; the Contractor or Subcontractor's respective agents, employees; or other persons performing any of the

Work. The Construction Manager shall have free access to any or all parts of Work at any time.

4.3 If the District does not use a Construction Manager on this Project, all references to Construction Manager or CM shall be read as District.

5. INSPECTOR, INSPECTIONS, AND TESTS

5.1 Project Inspector

5.1.1 One or more Project Inspector(s), including special Project Inspector(s), as required, will be assigned to the Work by District, in accordance with requirements of title 24, part 1, of the California Code of Regulations, to enforce the building code and monitor compliance with Plans and Specifications for the Project previously approved by the DSA. Duties of Project Inspector(s) are specifically defined in section 4-342 of said part 1 of title 24.

5.1.2 No Work shall be carried on except with the knowledge and under the inspection of the Project Inspector(s). The Project Inspector(s) shall have free access to any or all parts of Work at any time. Contractor shall furnish Project Inspector(s) reasonable opportunities for obtaining such information as may be necessary to keep Project Inspector(s) fully informed respecting progress and manner of work and character of materials, including, but not limited to, submission of form DSA 156 (or the most current version applicable at the time the Work is performed) to the Project Inspector at least 48 hours in advance of the commencement and completion of construction of each and every aspect of the Work. Forms are available on the DSA's website at: <http://www.dgs.ca.gov/dsa/Forms.aspx>. Inspection of Work shall not relieve Contractor from an obligation to fulfill this Contract. Project Inspector(s) and the DSA are authorized to suspend work whenever the Contractor and/or its Subcontractor(s) are not complying with the Contract Documents. Any work stoppage by the Project Inspector(s) and/or DSA shall be without liability to the District. Contractor shall instruct its Subcontractors and employees accordingly.

5.1.3 If Contractor and/or any Subcontractor requests that the Project Inspector(s) perform any inspection off-site, this shall only be done if it is allowable pursuant to applicable regulations and DSA approval, if the Project Inspector(s) agree to do so, and at the expense of the Contractor.

5.2 Tests and Inspections

5.2.1 Tests and Inspections shall comply with title 24, part 1, California Code of Regulations, group 1, article 5, section 4-335, and with the provisions of the Specifications.

5.2.2 The District will select an independent testing laboratory to conduct the tests. Selection of the materials required to be tested shall be by the laboratory or the District's representative and not by the Contractor. The Contractor shall notify the District's representative a sufficient time in advance of its readiness for required observation or inspection.

5.2.3 The Contractor shall notify the District's representative 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 District may arrange for the testing of same at the source of supply. This notice shall be, at a minimum, seventy-two (72) hours prior to the manufacture of the material that needs to be tested.

5.2.4 Any material shipped by the Contractor from the source of supply prior to having satisfactorily passed such testing and inspection or prior to the receipt of notice from said representative that such testing and inspection will not be required, shall not be incorporated into and/or onto the Project.

5.2.5 The District will select and pay testing laboratory costs for all tests and inspections. Contractor shall reimburse the District for any and all laboratory costs or other testing costs for any materials found to be not in compliance with the Contract Documents. At the District's discretion, District may elect to deduct laboratory or other testing costs for noncompliant materials from the Contract Price, and such deduction shall not constitute a withholding.

5.3 Costs for After Hours and/or Off Site Inspections

If the Contractor performs Work outside the Inspector's regular working hours or requests the Inspector to perform inspections off Site, costs of any inspections required outside regular working hours or off Site shall be borne by the Contractor and may be invoiced to the Contractor by the District or the District may deduct those expenses from the next Progress Payment.

6. CONTRACTOR

Contractor shall construct and complete, in a good and workmanlike manner, the Work for the Contract Price including any adjustment(s) to the Contract Price pursuant to provisions herein regarding changes to the Contract Price. Except as otherwise noted, Contractor shall provide and pay for all labor, materials, equipment, permits (excluding DSA), fees, licenses, facilities, transportation, taxes, bonds and insurance, and services necessary for the proper execution and completion of the Work, except as indicated herein.

6.1 Status of Contractor

6.1.1 Contractor is and shall at all times be deemed to be an independent contractor and shall be wholly responsible for the manner in which it and its Subcontractors perform the services required of it by the Contract Documents. Nothing herein contained shall be construed as creating the relationship of employer and employee, or principal and agent, between the District, or any of the District's employees or agents, and Contractor or any of Contractor's Subcontractors, agents or employees. Contractor assumes exclusively the responsibility for the acts of its agents, and employees as they relate to the services to be provided during the course and scope of their employment. Contractor, its Subcontractors, agents, and its employees shall not be entitled to any rights or privileges of District employees. District shall be permitted to monitor the Contractor's activities to determine compliance with the terms of this Contract.

6.1.2 As required by law, Contractor and all Subcontractors shall be properly licensed and regulated by the Contractor's State License Board, 9821 Business Park Drive, Sacramento, California 95827, <http://www.cslb.ca.gov>.

6.1.3 As required by law, Contractor and all Subcontractors shall be properly registered as public works contractors by the Department of Industrial Relations at: <https://efiling.dir.ca.gov/PWCR/ActionServlet?action=displayPWCRegistrationForm> or current URL.

6.2 Project Inspection Card(s)

Contractor shall verify that forms DSA 152 (or the current version applicable at the time the Work is performed) are issued for the Project prior to the commencement of construction.

6.3 Contractor's Supervision

6.3.1 During progress of the Work, Contractor shall keep on the Premises, and at all other locations where any Work related to the Contract is being performed, an experienced and competent project manager and construction superintendent who are employees of the Contractor, to whom the District does not object and at least one of whom shall be fluent in English, written and verbal.

6.3.2 The project manager and construction superintendent shall both speak fluently the predominant language of the Contractor's employees.

6.3.3 Before commencing the Work herein, Contractor shall give written notice to District of the name of its project manager and construction superintendent. Neither the Contractor's project manager nor construction superintendent shall be changed except with prior written notice to District. If the Contractor's project manager and/or construction superintendent proves to be unsatisfactory to Contractor, or to District, any of the District's employees, agents, the Construction Manager, or the Architect, Contractor shall notify District in writing before any change occurs, but no less than two business days prior. Any replacement of the project manager and/or construction superintendent shall be made promptly and must be satisfactory to the District. The Contractor's project manager and construction superintendent shall each represent Contractor, and all directions given to Contractor's project manager and/or construction superintendent shall be as binding as if given to Contractor.

6.3.4 Contractor shall give efficient supervision to Work, using its best skill and attention. Contractor shall carefully study and compare all Contract Documents, Drawings, Specifications, and other instructions and shall at once report to District, Construction Manager, and Architect any error, inconsistency, or omission that Contractor or its employees and Subcontractors may discover, in writing, with a copy to District's Project Inspector(s). The Contractor shall have responsibility for discovery of errors, inconsistencies, or omissions.

6.4 Duty to Provide Fit Workers

6.4.1 Contractor and Subcontractor(s) shall at all times enforce strict discipline and good order among their employees and shall not employ or work any unfit person or anyone not skilled in work assigned to that person. It shall be the responsibility of Contractor to ensure compliance with this requirement. District may require Contractor to permanently remove unfit persons from Project Site.

6.4.2 Any person in the employ of Contractor or Subcontractor(s) whom District may deem incompetent or unfit shall be excluded from working on the Project and shall not again be employed on the Project except with the prior written consent of District.

6.4.3 The Contractor shall furnish labor that can work in harmony with all other elements of labor employed or to be employed in the Work.

6.4.4 If Contractor intends to make any change in the name or legal nature of the Contractor's entity, Contractor must first notify the District in writing prior to making any contemplated change. The District shall determine in writing if Contractor's intended change is permissible while performing this Contract.

6.5 Field Office

6.5.1 Contractor shall provide a temporary office on the Work Site for the District's use exclusively, during the term of the Contract.

6.6 Purchase of Materials and Equipment

The Contractor is required to order, obtain, and store materials and equipment sufficiently in advance of its Work at no additional cost or advance payment from District to assure that there will be no delays.

6.7 Documents on Work

6.7.1 Contractor shall at all times keep on the Work Site, or at another location as the District may authorize in writing, one legible copy of all Contract Documents, including Addenda and Change Orders, and Titles 19 and 24 of the California Code of Regulations, the specified edition(s) of the Uniform Building Code, all approved Drawings, Plans, Schedules, and Specifications, and all codes and documents referred to in the Specifications, and made part thereof. These documents shall be kept in good order and available to District, Construction Manager, Architect, Architect's representatives, the Project Inspector(s), and all authorities having jurisdiction. Contractor shall be acquainted with and comply with the provisions of these titles as they relate to this Project. (See particularly the duties of Contractor, Title 24, Part 1, California Code of Regulations, section 4-343.) Contractor shall also be acquainted with and comply with all California Code of Regulations provisions relating to conditions on this Project, particularly Titles 8 and 17. Contractor shall coordinate with Architect and Construction Manager and shall submit its verified report(s) according to the requirements of Title 24.

6.7.2 Daily Job Reports.

6.7.2.1 Contractor shall maintain, at a minimum, at least one (1) set of Daily Job Reports on the Project. These must be prepared by the Contractor's employee(s) who are present on Site, and must include, at a minimum, the following information:

- 6.7.2.1.1** A brief description of all Work performed on that day.
- 6.7.2.1.2** A summary of all other pertinent events and/or occurrences on that day.
- 6.7.2.1.3** The weather conditions on that day.

- 6.7.2.1.4 A list of all Subcontractor(s) working on that day,
- 6.7.2.1.5 A list of each Contractor employee working on that day and the total hours worked for each employee.
- 6.7.2.1.6 A complete list of all equipment on Site that day, whether in use or not.
- 6.7.2.1.7 All complete list of all materials, supplies, and equipment delivered on that day.
- 6.7.2.1.8 A complete list of all inspections and tests performed on that day.

6.7.2.2 Each day Contractor shall provide a copy of the previous day's Daily Job Report to the District or the Construction Manager.

6.8 Preservation of Records

Contractor shall maintain, and District shall have the right to inspect, Contractor's financial records for the Project, including, without limitation, Job Cost Reports for the Project in compliance with the criteria set forth herein. The District shall have the right to examine and audit all Daily Job Reports or other Project records of Contractor's project manager(s), project superintendent(s), and/or project foreperson(s), all certified payroll records and/or related documents including, without limitation, Job Cost Reports, payroll, payment, timekeeping and tracking documents; all books, estimates, records, contracts, documents, bid documents, bid cost data, subcontract job cost reports, and other data of the Contractor, any Subcontractor, and/or supplier, including computations and projections related to bidding, negotiating, pricing, or performing the Work or Contract modification, in order to evaluate the accuracy, completeness, and currency of the cost, manpower, coordination, supervision, or pricing data at no additional cost to the District. These documents may be duplicative and/or be in addition to any Bid Documents held in escrow by the District. The Contractor shall make available at its office at all reasonable times the materials described in this paragraph for the examination, audit, or reproduction until three (3) years after final payment under this Contract. Notwithstanding the provisions above, Contractor shall provide any records requested by any governmental agency, if available, after the time set forth above.

6.9 Integration of Work

6.9.1 Contractor shall do all cutting, fitting, patching, and preparation of Work as required to make its several parts come together properly, to fit it to receive or be received by work of other contractors, and to coordinate tolerances to various pieces of work, showing upon, or reasonably implied by, the Drawings and Specifications for the completed structure, and shall conform them as District and/or Architect may direct.

6.9.2 Contractor shall make its own layout of lines and elevations and shall be responsible for the accuracy of both Contractor's and Subcontractors' work resulting therefrom.

6.9.3 Contractor and all Subcontractors shall take all field dimensions required in performance of the Work, and shall verify all dimensions and conditions on the Site. All dimensions affecting proper fabrication and installation of all Work must be verified prior to fabrication by taking field measurements of the true conditions. If there are any discrepancies between dimensions in drawings and existing conditions which will affect the Work, Contractor shall bring such discrepancies to the attention

of the District and Architect for adjustment before proceeding with the Work. In doing so, it is recognized that Contractor is not acting in the capacity of a licensed design professional, and that Contractor's examination is made in good faith to facilitate construction and does not create an affirmative responsibility to detect errors, omissions or inconsistencies in the Contract Documents or to ascertain compliance with applicable laws, building codes or regulations. Following receipt of written notice from Contractor, the District and/or Architect shall inform Contractor what action, if any, Contractor shall take with regard to such discrepancies.

6.9.4 All costs caused by noncompliant, defective, or delayed Work shall be borne by Contractor, inclusive of repair work.

6.9.5 Contractor shall not endanger any work performed by it or anyone else by cutting, excavating, or otherwise altering work and shall not cut or alter work of any other contractor except with consent of District.

6.10 Notifications

6.10.1 Contractor shall notify the Architect and Project Inspector, in writing, of the commencement of construction of each and every aspect of the Work at least 48 hours in advance by submitting form DSA 156 (or the most current version applicable at the time the Work is performed) to the Project Inspector. Forms are available on the DSA's website at: <http://www.dgs.ca.gov/dsa/Forms.aspx>.

6.10.2 Contractor shall notify the Architect and Project Inspector, in writing, of the completion of construction of each and every aspect of the Work at least 48 hours in advance by submitting form DSA 156 (or current version) to the Project Inspector.

6.11 Obtaining of Permits, Licenses and Registrations

Contractor shall secure and pay for all permits (except DSA), licenses, registrations, approvals and certificates necessary for prosecution of Work, including but not limited to those listed in the Special Conditions, if any, before the date of the commencement of the Work or before the permits, licenses, registrations, approvals and certificates are legally required to continue the Work without interruption. The Contractor shall obtain and pay, only when legally required, for all licenses, registrations, approvals, permits, inspections, and inspection certificates required to be obtained from or issued by any authority having jurisdiction over any part of the Work included in the Contract. All final permits, licenses, registrations, approvals and certificates shall be delivered to District before demand is made for final payment.

6.12 Royalties and Patents

6.12.1 Contractor shall obtain and pay, only when legally required, all royalties and license fees necessary for prosecution of Work before the earlier of the date of the commencement of the Work or the date that the license is legally required to continue the Work without interruption. Contractor shall defend suits or claims of infringement of patent, copyright, or other rights and shall hold the District, the Architect, and the Construction Manager harmless and indemnify them from loss on account thereof except when a particular design, process, or make or model of product is required by the Contract Documents. However, if the Contractor has reason to believe that the required design, process, or product is an infringement of

a patent or copyright, the Contractor shall indemnify and defend the District, Architect and Construction Manager against any loss or damage unless the Contractor promptly informs the District of its information.

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

6.13 Work to Comply With Applicable Laws and Regulations

6.13.1 Contractor shall give all notices and comply with the following specific laws, ordinances, rules, and regulations and all other applicable laws, ordinances, rules, and regulations bearing on conduct of Work as indicated and specified, including but not limited to the appropriate statutes and administrative code sections. If Contractor observes that Drawings and Specifications are at variance therewith, or should Contractor become aware of the development of conditions not covered by Contract Documents that may result in finished Work being at variance therewith, Contractor shall promptly notify District in writing and any changes deemed necessary by District shall be made as provided in Contract for changes in Work.

6.13.1.1 National Electrical Safety Code, U. S. Department of Commerce

6.13.1.2 National Board of Fire Underwriters' Regulations

6.13.1.3 Uniform Building Code, latest addition, and the California Code of Regulations, title 24, and other amendments

6.13.1.4 Manual of Accident Prevention in Construction, latest edition, published by A.G.C. of America

6.13.1.5 Industrial Accident Commission's Safety Orders, State of California

6.13.1.6 Regulations of the State Fire Marshall (title 19, California Code of Regulations) and Pertinent Local Fire Safety Codes

6.13.1.7 Americans with Disabilities Act

6.13.1.8 Education Code of the State of California

6.13.1.9 Government Code of the State of California

6.13.1.10 Labor Code of the State of California, division 2, part 7, Public Works and Public Agencies

6.13.1.11 Public Contract Code of the State of California

6.13.1.12 California Art Preservation Act

6.13.1.13 U. S. Copyright Act

6.13.1.14 U. S. Visual Artists Rights Act

6.13.2 Contractor shall comply with all applicable mitigation measures, if any, adopted by any public agency with respect to this Project pursuant to the California Environmental Quality Act (Public Resources Code section 21000 *et seq.*)

6.13.3 If Contractor performs any Work that it knew, or through exercise of reasonable care should have known, to be contrary to any applicable laws, ordinance, rules, or regulations, Contractor shall bear all costs arising therefrom and arising from the correction of said Work.

6.13.4 Where Specifications or Drawings state that materials, processes, or procedures must be approved by the DSA, State Fire Marshall, or other body or agency, Contractor shall be responsible for satisfying requirements of such bodies or agencies applicable at the time the Work is performed, and as determined by those bodies or agencies.

6.14 Safety/Protection of Persons and Property

6.14.1 The Contractor will be solely and completely responsible for conditions of the Work Site, including safety of all persons and property during performance of the Work. This requirement will apply continuously and not be limited to normal working hours.

6.14.2 The wearing of hard hats will be mandatory at all times for all personnel on Site. Contractor shall supply sufficient hard hats to properly equip all employees and visitors.

6.14.3 Any construction review of the Contractor's performance is not intended to include review of the adequacy of the Contractor's safety measures in, on, or near the Work Site.

6.14.4 Implementation and maintenance of safety programs shall be the sole responsibility of the Contractor.

6.14.5 The Contractor shall furnish to the District a copy of the Contractor's safety plan within the time frame indicated in the Contract Documents and specifically adapted for the Project.

6.14.6 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 completion and final acceptance by District. All Work shall be solely at Contractor's risk with the exception of damage to the Work caused by "acts of God" as defined in Public Contract Code section 7105.

6.14.7 Contractor shall take, and require Subcontractors to take, all necessary precautions for safety of workers on the Project 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. Contractor shall furnish, erect, and properly maintain at all times, all necessary safety devices, safeguards, construction canopies, signs, 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.

6.14.8 Hazards Control – Contractor shall store volatile wastes in covered metal containers and remove them from the Site daily. Contractor shall prevent accumulation of wastes that create hazardous conditions. Contractor shall provide adequate ventilation during use of volatile or noxious substances.

6.14.9 Contractor shall designate a responsible member of its organization on the Project, 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. Name and position of person so designated shall be reported to District by Contractor.

6.14.10 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, Contractor shall correct such violation promptly.

6.14.11 Contractor shall comply with any District storm water requirements that are approved by the District and applicable to the Project, at no additional cost to the District.

6.14.12 In an emergency affecting safety of life or of work or of adjoining property, Contractor, without special instruction or authorization, shall act, at its discretion, to prevent such threatened loss or injury. Any compensation claimed by Contractor on account of emergency work shall be determined by agreement.

6.14.13 All salvage materials will become the property of the Contractor and shall be removed from the Site unless otherwise called for in the Contract Documents. However, the District reserves the right to designate certain items of value that shall be turned over to the District unless otherwise directed by District.

6.14.14 All connections to public utilities and/or existing on-site services shall be made and maintained in such a manner as to not interfere with the continuing use of same by the District during the entire progress of the Work.

6.14.15 Contractor shall provide such heat, covering, and enclosures as are necessary to protect all Work, materials, equipment, appliances, and tools against damage by weather conditions, such as extreme heat, cold, rain, snow, dry winds, flooding, or dampness.

6.14.16 The Contractor shall protect and preserve the Work from all damage or accident, providing any temporary roofs, window and door coverings, boxings, or other construction as required by the Architect. The Contractor shall be responsible for existing structures, walks, roads, trees, landscaping, and/or improvements in working areas; and shall provide adequate protection therefore. If temporary removal is necessary of any of the above items, or damage occurs due to the Work, the Contractor shall replace same at his expense with same kind, quality, and size of Work or item damaged. This shall include any adjoining property of the District and others.

6.14.17 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.

6.14.18 Contractor shall confine apparatus, the storage of materials, and the operations of workers to limits indicated by law, ordinances, permits, or directions of Architect, and shall not interfere with the Work or unreasonably encumber Premises or overload any structure with materials. Contractor shall enforce all instructions of District and Architect regarding signs, advertising, fires, and smoking, and require that all workers comply with all regulations while on Project Site.

6.14.19 Contractor, Contractor's employees, Subcontractors, Subcontractors' employees, or any person associated with the Work shall conduct themselves in a manner appropriate for a school site. No verbal or physical contact with neighbors, students, and faculty, profanity, or inappropriate attire or behavior will be permitted. District may require Contractor to permanently remove non-complying persons from Project Site.

6.14.20 Contractor shall take care to prevent disturbing or covering any survey markers, monuments, or other devices marking property boundaries or corners. If such markers are disturbed, Contractor shall have a civil engineer, registered as a professional engineer in California, replace them at no cost to District.

6.14.21 In the event that the Contractor enters into any agreement with owners of any adjacent property to enter upon the adjacent property for the purpose of performing the Work, Contractor shall fully indemnify, defend, and hold harmless each person, entity, firm, or agency that owns or has any interest in adjacent property. The form and content of the agreement of indemnification shall be approved by the District prior to the commencement of any Work on or about the adjacent property. The Contractor shall also indemnify the District as provided in the indemnification provision herein. These provisions shall be in addition to any other requirements of the owners of the adjacent property.

6.15 Working Evenings and Weekends

Contractor may be required to work increased hours, evenings, and/or weekends at no additional cost to the District. Contractor shall give the District seventy-two (72) hours' notice prior to performing any evening and/or weekend work. Contractor shall perform all evening and/or weekend work only upon District's approval and in compliance with all applicable rules, regulations, laws, and local ordinances including, without limitation, all noise and light limitations. Contractor shall reimburse the District for any increased or additional Inspector charges as a result of Contractor's increased hours, or evening and/or weekend work.

6.16 Cleaning Up

6.16.1 The Contractor shall provide all services, labor, materials, and equipment necessary for protecting and securing the Work, all school occupants, furnishings, equipment, and building structure from damage until its completion and final acceptance by District. Dust barriers shall be provided to isolate dust and dirt from construction operations. At completion of the Work and portions thereof, Contractor shall clean to the original state any areas beyond the Work area that become dust laden as a result of the Work. The Contractor must erect the necessary warning signs and barricades to ensure the safety of all school occupants. The Contractor at

all times must maintain good housekeeping practices to reduce the risk of fire damage and must make a fire extinguisher, fire blanket, and/or fire watch, as applicable, available at each location where cutting, braising, soldering, and/or welding is being performed or where there is an increased risk of fire.

6.16.2 Contractor at all times shall keep Premises, including property immediately adjacent thereto, free from debris such as waste, rubbish (including personal rubbish of workers, e.g., food wrappers, etc.), and excess materials and equipment caused by the Work. Contractor shall not leave debris under, in, or about the Premises (or surrounding property or neighborhood), but shall promptly remove same from the Premises on a daily basis. If Contractor fails to clean up, District may do so and the cost thereof shall be charged to Contractor. If Contract is for work on an existing facility, Contractor shall also perform specific clean-up on or about the Premises upon request by the District as it deems necessary for the continuing education process. Contractor shall comply with all related provisions of the Specifications.

6.16.3 If the Construction Manager, Architect, or District observes the accumulation of trash and debris, the District will give the Contractor a 24-hour written notice to mitigate the condition.

6.16.4 Should the Contractor fail to perform the required clean-up, or should the clean-up be deemed unsatisfactory by the District, the District will then perform the clean-up. All cost associated with the clean-up work (including all travel, payroll burden, and costs for supervision) will be deducted from the Contract Price, or District may withhold those amounts from payment(s) to Contractor.

7. SUBCONTRACTORS

7.1 Contractor shall provide the District with information for all Subcontracts as indicated in the Contractor's Submittals and Schedules Section herein.

7.2 No contractual relationship exists between the District and any Subcontractor, supplier, or sub-subcontractor by reason of this Contract.

7.3 Contractor agrees to bind every Subcontractor by terms of this Contract as far as those terms that are applicable to Subcontractor's work including, without limitation, all labor, wage & hour, apprentice and related provisions and requirements. If Contractor shall subcontract any part of this Contract, Contractor shall be as fully responsible to District for acts and omissions of any Subcontractor and of persons either directly or indirectly employed by any Subcontractor, including Subcontractor caused Project delays, as it is for acts and omissions of persons directly employed by Contractor. The divisions or sections of the Specifications are not intended to control the Contractor in dividing the Work among Subcontractors or limit the work performed by any trade.

7.4 District's consent to, or approval of, or failure to object to, any Subcontractor under this Contract shall not in any way relieve Contractor of any obligations under this Contract and no such consent shall be deemed to waive any provisions of this Contract.

7.5 Contractor is directed to familiarize itself with sections 4100 through 4114 of the Public Contract Code of the State of California, as regards subletting and subcontracting, and to comply with all applicable requirements therein. In addition,

Contractor is directed to familiarize itself with sections 1720 through 1861 of the Labor Code of the State of California, as regards the payment of prevailing wages and related issues, and to comply with all applicable requirements therein all including, without limitation, section 1775 and the Contractor's and Subcontractors' obligations and liability for violations of prevailing wage law and other applicable laws.

7.6 No Contractor whose Bid is accepted shall, without consent of the awarding authority and in full compliance with section 4100 *et seq.* of the Public Contract Code, including, without limitation, sections 4107, 4107.5, and 4109 of the Public Contract Code, and section 1771.1 of the Labor Code, either:

7.6.1 Substitute any person as a Subcontractor in place of the Subcontractor designated in the original Bid; or

7.6.2 Permit any Subcontract to be assigned or transferred, or allow any portion of the Work to be performed by anyone other than the original Subcontractor listed in the Bid; or

7.6.3 Sublet or subcontract any portion of the Work in excess of one-half of one percent (0.5%) of the Contractor's total bid as to which his original bid did not designate a Subcontractor.

7.7 The Contractor shall be responsible for the coordination of the trades, Subcontractors, sub-subcontractors, and material or equipment suppliers working on the Project.

7.7.1 If the Contract is valued at \$1 million or more and uses, or plans to use, state bond funds, then Contractor is responsible for ensuring that first tier Subcontractors holding C-4, C-7, C-10, C-16, C-20, C-34, C-36, C-38, C-42, C-43, and/or C-46 licenses are prequalified by the District to work on the Project pursuant to Public Contract Code section 20111.6.

7.7.2 Contractor is responsible for ensuring that all Subcontractors are properly registered as public works contractors by the Department of Industrial Relations.

7.8 Contractor is solely responsible for settling any differences between the Contractor and its Subcontractor(s) or between Subcontractors.

7.9 Contractor must include in all of its subcontracts the assignment provisions as indicated in the Termination section of these General Conditions.

8. OTHER CONTRACTS/CONTRACTORS

8.1 District reserves the right to let other contracts, and/or to perform work with its own forces, in connection with the Project. Contractor shall afford other contractors reasonable opportunity for introduction and storage of their materials and execution of

their work and shall properly coordinate and connect Contractor's Work with the work of other contractors.

8.2 In addition to Contractor's obligation to protect its own Work, Contractor shall protect the work of any other contractor that Contractor encounters while working on the Project.

8.3 If any part of Contractor's Work depends for proper execution or results upon work of District or any other contractor, the Contractor shall inspect and, before proceeding with its Work, promptly report to the District in writing any defects in District's or any other contractor's work that render Contractor's Work unsuitable for proper execution and results. Contractor shall be held accountable for damages to District for District's or any other contractor's work that Contractor failed to inspect or should have inspected. Contractor's failure to inspect and report shall constitute Contractor's acceptance of all District's or any other contractor's work as fit and proper for reception of Contractor's Work, except as to defects that may develop in District's or any other contractor's work after execution of Contractor's Work and not caused by execution of Contractor's Work.

8.4 To ensure proper execution of its subsequent work, Contractor shall measure and inspect work already in place and shall at once report to the District in writing any discrepancy between that executed work and the Contract Documents.

8.5 Contractor shall ascertain to its own satisfaction the scope of the Project and nature of District's or any other contracts that have been or may be awarded by District in prosecution of the Project to the end that Contractor may perform this Contract in light of the other contracts, if any.

8.6 Nothing herein contained shall be interpreted as granting to Contractor exclusive occupancy of the Site, the Premises, or of the Project. Contractor shall not cause any unnecessary hindrance or delay to the use and/or school operation(s) of the Premises and/or to District or any other contractor working on the Project. If simultaneous execution of any contract or school operation is likely to cause interference with performance of Contractor's Contract, Contractor shall coordinate with those contractor(s), person(s), and/or entity(s) and shall notify the District of the resolution.

9. DRAWINGS AND SPECIFICATIONS

9.1 A complete list of all Drawings that form a part of the Contract is to be found as an index on the Drawings themselves, and/or may be provided to the Contractor and/or in the Table of Contents.

9.2 Materials or Work described in words that so applied have a well-known technical or trade meaning shall be deemed to refer to recognized standards, unless noted otherwise.

9.3 Trade Name or Trade Term. It is not the intention of this Contract to go into detailed descriptions of any materials and/or methods commonly known to the trade under "trade name" or "trade term." The mere mention or notation of "trade name" or "trade term" shall be considered a sufficient notice to Contractor that it will be required

to complete the work so named, complete, finished, and operable, with all its appurtenances, according to the best practices of the trade.

9.4 The naming of any material and/or equipment shall mean furnishing and installing of same, including all incidental and accessory items thereto and/or labor therefor, as per best practices of the trade(s) involved, unless specifically noted otherwise.

9.5 Contract Documents are complementary, and what is called for by one shall be binding as if called for by all. As such, Drawings and Specifications are intended to be fully cooperative and to agree. However, if Contractor observes that Drawings and Specifications are in conflict with the Contract Documents, Contractor shall promptly notify District and Architect in writing, and any necessary changes shall be made as provided in the Contract Documents.

9.6 In the case of discrepancy or ambiguity in the Contract Documents, the order of precedence in the Agreement shall prevail. However, in the case of discrepancy or ambiguity solely between and among the Drawings and Specifications, the discrepancy or ambiguity shall be resolved in favor of the interpretation that will provide District with the functionally complete and operable Project described in the Drawings and Specifications. In case of ambiguity, conflict, or lack of information, District will furnish clarifications with reasonable promptness.

9.7 Drawings and Specifications are intended to comply with all laws, ordinances, rules, and regulations of constituted authorities having jurisdiction, and where referred to in the Contract Documents, the laws, ordinances, rules, and regulations shall be considered as a part of the Contract within the limits specified. Contractor shall bear all expense of correcting work done contrary to said laws, ordinances, rules, and regulations.

9.8 Ownership of Drawings

All copies of Plans, Drawings, Designs, Specifications, and copies of other incidental architectural and engineering work, or copies of other Contract Documents furnished by District, are the property of District. They are not to be used by Contractor in other work and, with the exception of signed sets of Contract Documents, are to be returned to District on request at completion of Work, or may be used by District as it may require without any additional costs to District. Neither the Contractor nor any Subcontractor, or material or equipment supplier shall own or claim a copyright in the Drawings, Specifications, and other documents prepared by the Architect. District hereby grants the Contractor, Subcontractors, sub-subcontractors, and material or equipment suppliers a limited license to use applicable portions of the Drawings prepared for the Project in the execution of their Work under the Contract Documents.

10. CONTRACTOR'S SUBMITTALS AND SCHEDULES

Contractor's submittals shall comply with the provisions and requirements of the Specifications including, without limitation Submittals.

10.1 Schedule of Work, Schedule of Submittals, and Schedule of Values

10.1.1 Within **TEN (10)** calendar days after the date of the Notice to Proceed (unless otherwise specified in the Specifications), the Contractor shall prepare and

submit to the District for review, in a form supported by sufficient data to substantiate its accuracy as the District may require:

10.1.1.1 Preliminary Schedule. A preliminary schedule of construction indicating the starting and completion dates of the various stages of the Work, including any information and following any form as may be specified in the Specifications. Once approved by District, this shall become the Construction Schedule. This schedule shall include and identify all tasks that are on the Project's critical path with a specific determination of the start and completion of each critical path task as well as all Contract milestones and each milestone's completion date(s) as may be required by the District.

10.1.1.2 Preliminary Schedule of Values. A preliminary schedule of values for all of the Work, which must include quantities and prices of items aggregating the Contract Price and must subdivide the Work into component parts in sufficient detail to serve as the basis for progress payments during construction. Unless the Special Conditions contain different limits, this preliminary schedule of values shall include, at a minimum, the following information and the following structure:

10.1.1.2.1 Divided into at least the following categories:

- 10.1.1.2.1.1** Overhead and profit;
- 10.1.1.2.1.2** Supervision;
- 10.1.1.2.1.3** General conditions;
- 10.1.1.2.1.4** Layout;
- 10.1.1.2.1.5** Mobilization;
- 10.1.1.2.1.6** Submittals;
- 10.1.1.2.1.7** Bonds and insurance;
- 10.1.1.2.1.8** Close-out/Certification documentation;
- 10.1.1.2.1.9** Demolition;
- 10.1.1.2.1.10** Installation;
- 10.1.1.2.1.11** Rough-in;
- 10.1.1.2.1.12** Finishes;
- 10.1.1.2.1.13** Testing;
- 10.1.1.2.1.14** Punchlist and acceptance.

10.1.1.2.2 And also divided by each of the following areas:

- 10.1.1.2.2.1** Site work;
- 10.1.1.2.2.2** By each building;
- 10.1.1.2.2.3** By each floor.

10.1.1.2.3 The preliminary schedule of values shall not provide for values any greater than the following percentages of the Contract value:

- 10.1.1.2.3.1** Mobilization and layout combined to equal not more than 1%;
- 10.1.1.2.3.2** Submittals, samples and shop drawings combined to equal not more than 3%;
- 10.1.1.2.3.3** Bonds and insurance combined to equal not more than 2%.

10.1.1.2.4 Closeout documentation shall have a value in the preliminary schedule of not less than 5%.

10.1.1.2.5 Notwithstanding any provision of the Contract Documents to the contrary, payment of the Contractor's overhead, supervision, general conditions costs, and profit, as reflected in the Cost Breakdown, shall be paid based on percentage complete, with the disbursement of Progress Payments and the Final Payment.

10.1.1.2.6 Contractor shall certify that the preliminary schedule of values as submitted to the District is accurate and reflects the costs as developed in preparing Contractor's bid. The preliminary schedule of values shall be subject to the District's review and approval of the form and content thereof. In the event that the District objects to any portion of the preliminary schedule of values, the District shall notify the Contractor, in writing, of the District's objection(s) to the preliminary schedule of values. Within five (5) calendar days of the date of the District's written objection(s), Contractor shall submit a revised preliminary schedule of values to the District for review and approval. The foregoing procedure for the preparation, review and approval of the preliminary schedule of values shall continue until the District has approved the entirety of the preliminary schedule of values.

10.1.1.2.7 Once the preliminary schedule of values is approved by the District, this shall become the Schedule of Values. The Schedule of Values shall not be thereafter modified or amended by the Contractor without the prior consent and approval of the District, which may be granted or withheld in the sole discretion of the District.

10.1.1.3 Preliminary Schedule of Submittals. A preliminary schedule of submittals, including Shop Drawings, Product Data, and Samples submittals. Once approved by District, this shall become the Submittal Schedule. All submittals shall be forwarded to the District by the date indicated on the approved Submittal Schedule, unless an earlier date is necessary to maintain the Construction Schedule, in which case those submittals shall be forwarded to the District so as not to delay the Construction Schedule. Upon request by the District, Contractor shall provide an electronic copy of all submittals to the District. All submittals shall be submitted no later than 90 days after the Notice to Proceed.

10.1.1.4 Safety Plan. Contractor's Safety Plan specifically adapted for the Project. Contractor's Safety Plan shall comply with the following requirements:

10.1.1.4.1 All applicable requirements of California Division of Industrial Safety ("CalOSHA") and/or of the United States Occupational Safety and Health Administration ("OSHA").

10.1.1.4.2 All provisions regarding Project safety, including all applicable provisions in these General Conditions.

10.1.1.4.3 Contractor's Safety Plan shall be in English and in the language(s) of the Contractor's and its Subcontractors' employees.

10.1.1.5 Complete Subcontractor List. The name, address, telephone number, facsimile 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.

10.1.2 Contractor must provide all schedules both in hard copy and electronically, in a format (e.g., Microsoft Project or Primavera) approved in advance by the District.

10.1.3 The District will review the schedules submitted and the Contractor shall make changes and corrections in the schedules as requested by the District and resubmit the schedules until approved by the District.

10.1.4 The District shall have the right at any time to revise the schedule of values if, in the District's sole opinion, the schedule of values does not accurately reflect the value of the Work performed.

10.1.5 All submittals and schedules must be approved by the District before Contractor can rely on them as a basis for payment.

10.2 Monthly Progress Schedule(s)

10.2.1 Contractor shall provide Monthly Progress Schedule(s) to the District. A Monthly Progress Schedule shall update the approved Construction Schedule or the last Monthly Progress Schedule, showing all work completed and to be completed. The monthly Progress Schedule shall be sent within the timeframe requested by the District and shall be in a format acceptable to the District and contain a written narrative of the progress of work that month and any changes, delays, or events that may affect the work. The process for District approval of the Monthly Progress Schedule shall be the same as the process for approval of the Construction Schedule.

10.2.2 Contractor shall submit Monthly Progress Schedule(s) with all payment applications.

10.2.3 Contractor must provide all schedules both in hard copy and electronically, in a format (e.g., Microsoft Project or Primavera) approved in advance by the District.

10.2.4 The District will review the schedules submitted and the Contractor shall make changes and corrections in the schedules as requested by the District and resubmit the schedules until approved by the District.

10.2.5 The District shall have the right at any time to revise the schedule of values if, in the District's sole opinion, the schedule of values does not accurately reflect the value of the Work performed.

10.2.6 All submittals and schedules must be approved by the District before Contractor can rely on them as a basis for payment.

10.3 Material Safety Data Sheets (MSDS)

Contractor is required to ensure Material Safety Data Sheets are available in a readily accessible place at the Work Site for any material requiring a Material Safety Data Sheet

per the Federal "Hazard Communication" standard, or employees right to know law. The Contractor is also required to ensure proper labeling on substance brought onto the job site and 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. Two additional copies of the Material Safety Data Sheets shall also be submitted directly to the District.

11. SITE ACCESS, CONDITIONS, AND REQUIREMENTS

11.1 Site Investigation

Before bidding on this Work, Contractor shall make a careful investigation of the Site and thoroughly familiarize itself with the requirements of the Contract. By the act of submitting a bid for the Work included in this Contract, Contractor shall be deemed to have made a complete study and investigation, and to be familiar with and accepted the existing conditions of the Site.

Prior to commencing the Work, Contractor and the District's representative shall survey the Site to document the condition of the Site. Contractor will record the survey in digital videotape format and provide an electronic copy to the District within fourteen (14) days of the survey. This electronic record shall serve as a basis for determining any damages caused by the Contractor during the Project. The Contractor may also document any pre-existing conditions in writing, provided that both the Contractor and the District's representative agree on said conditions and sign a memorandum documenting the same.

11.2 Soils Investigation Report

11.2.1 When a soils investigation report obtained from test holes at Site or for the Project is available, that report may be available to the Contractor but shall not be a part of this Contract and shall not alleviate or excuse the Contractor's obligation to perform its own investigation. Any information obtained from that report or any information given on Drawings as to subsurface soil condition or to elevations of existing grades or elevations of underlying rock is approximate only, is not guaranteed, does not form a part of this Contract, and Contractor may not rely thereon. By submitting its bid, Contractor acknowledges that it has made visual examination of Site and has made whatever tests Contractor deems appropriate to determine underground condition of soil.

11.2.2 Contractor agrees that no claim against District will be made by Contractor for damages and hereby waives any rights to damages if, during progress of Work, Contractor encounters subsurface or latent conditions at Site materially differing from those shown on Drawings or indicated in Specifications, or for unknown conditions of an unusual nature that differ materially from those ordinarily encountered in the work of the character provided for in Plans and Specifications, except as indicated in the provisions of these General Conditions regarding trenches, trenching, and/or existing utility lines.

11.3 Access to Work

District and its representatives shall at all times have access to Work wherever it is in preparation or progress, including storage and fabrication. Contractor shall provide safe

and proper facilities for such access so that District's representatives may perform their functions.

11.4 Layout and Field Engineering

11.4.1 All field engineering required for layout of this Work and establishing grades for earthwork operations shall be furnished by Contractor at its expense. This Work shall be done by a qualified, California-registered civil engineer approved in writing by District and Architect. Any required Record and/or As-Built Drawings of Site development shall be prepared by the approved civil engineer.

11.4.2 The Contractor shall be responsible for having ascertained pertinent local conditions such as location, accessibility, and general character of the Site and for having satisfied itself as to the conditions under which the Work is to be performed. Contractor shall follow best practices, including but not limited to pot holing to avoid utilities. District shall not be liable for any claim for allowances because of Contractor's error, failure to follow best practices, or negligence in acquainting itself with the conditions at the Site.

11.4.3 Contractor shall protect and preserve established benchmarks and monuments and shall make no changes in locations without the prior written approval of District. Contractor shall replace any benchmarks or monuments that are lost or destroyed subsequent to proper notification of District and with District's approval.

11.5 Utilities

Utilities shall be provided as indicated in the Specifications.

11.6 Sanitary Facilities

Sanitary facilities shall be provided as indicated in the Specifications.

11.7 Surveys

Contractor shall provide surveys done by a California-licensed civil engineer surveyor to determine locations of construction, grading, and site work as required to perform the Work.

11.8 Regional Notification Center

The Contractor, except in an emergency, shall contact the appropriate regional notification center at least two (2) days prior to commencing any excavation if the excavation will be conducted in an area or in a private easement that is known, or reasonably should be known, to contain subsurface installations other than the underground facilities owned or operated by the District, and obtain an inquiry identification number from that notification center. No excavation shall be commenced and/or carried out by the Contractor unless an inquiry identification number has been assigned to the Contractor or any Subcontractor and the Contractor has given the District the identification number. Any damages arising from Contractor's failure to make appropriate notification shall be at the sole risk and expense of the Contractor. Any delays caused by failure to make appropriate notification shall be at the sole risk of the Contractor and shall not be considered for an extension of the Contract Time.

11.9 Existing Utility Lines

11.9.1 Pursuant to Government Code section 4215, District assumes the responsibility for removal, relocation, and protection of main or trunk utility lines and facilities located on the construction Site at the time of commencement of construction under this Contract with respect to any such utility facilities that are not identified in the Plans and Specifications. Contractor shall not be assessed for liquidated damages for delay in completion of the Project caused by failure of District or the owner of a utility to provide for removal or relocation of such utility facilities.

11.9.2 Locations of existing utilities provided by District shall not be considered exact, but approximate within reasonable margin and shall not relieve Contractor of responsibilities to exercise reasonable care or costs of repair due to Contractor's failure to do so. District shall compensate Contractor for the costs of locating, repairing damage not due to the failure of Contractor to exercise reasonable care, and removing or relocating such utility facilities not indicated in the Plans and Specifications with reasonable accuracy, and for equipment necessarily idle during such work.

11.9.3 No provision herein shall be construed to preclude assessment against Contractor for any other delays in completion of the Work. Nothing in this Article shall be deemed to require District to indicate the presence of existing service laterals, appurtenances, or other utility lines, within the exception of main or trunk utility lines or whenever the presence of these utilities on the Site of the construction Project can be inferred from the presence of other visible facilities, such as buildings, meter junction boxes, on or adjacent to the Site of the construction.

11.9.4 If Contractor, while performing Work under this Contract, discovers utility facilities not identified by District in Contract Plans and Specifications, Contractor shall immediately notify the District and the utility in writing. The cost of repair for damage to above-mentioned visible facilities without prior written notification to the District shall be borne by the Contractor.

11.10 Notification

Contractor understands, acknowledges and agrees that the purpose for prompt notification to the District pursuant to these provisions is to allow the District to investigate the condition(s) so that the District shall have the opportunity to decide how the District desires to proceed as a result of the condition(s). Accordingly, failure of Contractor to promptly notify the District in writing, pursuant to these provisions, shall constitute Contractor's waiver of any claim for damages or delay incurred as a result of the condition(s).

11.11 Hazardous Materials

Contractor shall comply with all provisions and requirements of the Contract Documents related to hazardous materials including, without limitation, Hazardous Materials Procedures and Requirements.

11.12 No Signs

Neither the Contractor nor any other person or entity shall display any signs not required by law or the Contract Documents at the Site, fences trailers, offices, or elsewhere on the Site without specific prior written approval of the District.

12. TRENCHES

12.1 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 Contractor shall, in advance of excavation, promptly submit to the District and/or a registered civil or structural engineer employed by the District or Architect, a detailed plan, stamped by a licensed engineer retained by the Contractor, showing the design of shoring for protection from the hazard of caving ground during the excavation of such trench or trenches.

12.2 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.

12.3 No Tort Liability of District

Pursuant to Labor Code section 6705, nothing in this Article shall impose tort liability upon the District or any of its employees.

12.4 No Excavation without Permits

The Contractor shall not commence any excavation Work until it has secured all necessary permits including the required CAL OSHA excavation/shoring permit. Any permits shall be prominently displayed on the Site prior to the commencement of any excavation.

12.5 Discovery of Hazardous Waste and/or Unusual Conditions

12.5.1 Pursuant to Public Contract Code section 7104, if the Work involves digging trenches or other excavations that extend deeper than four feet below the Surface, the Contractor shall promptly, and before the following conditions are disturbed, notify the District, in writing, of any:

12.5.1.1 Material that the Contractor believes may be 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 provisions of existing law.

12.5.1.2 Subsurface or latent physical conditions at the Site differing from those indicated.

12.5.1.3 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.

12.5.2 The District shall promptly investigate the conditions, and if it finds that the conditions do materially so differ, or do involve hazardous waste, and cause a decrease or increase in the Contractor's cost of, or the time required for, performance of any part of the Work, shall issue a Change Order under the procedures described herein.

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

13. INSURANCE AND BONDS

13.1 Insurance

Unless different provisions and/or limits are indicated in the Special Conditions, all insurance required of Contractor and/or its Subcontractor(s) shall be in the amounts and include the provisions set forth herein.

13.1.1 Commercial General Liability and Automobile Liability Insurance

13.1.1.1 Contractor shall procure and maintain, during the life of this Contract, Commercial General Liability Insurance and Automobile Liability Insurance that shall protect Contractor, District, State, Construction Manager(s), Project Inspector(s), and Architect(s) from all claims for bodily injury, property damage, personal injury, death, advertising injury, and medical payments arising from operations under this Contract. This coverage shall be provided in a form at least as broad as Insurance Services (ISO) Form CG 0001 11188. Contractor shall ensure that Products Liability and Completed Operations coverage, Fire Damage Liability, and Any Auto including owned, non-owned, and hired, are included within the above policies and at the required limits, or Contractor shall procure and maintain these coverages separately.

13.1.1.2 Contractor's deductible or self-insured retention for its Commercial General Liability Insurance policy shall not exceed \$25,000 unless approved in writing by District.

13.1.1.3 All such policies shall be written on an occurrence form.

13.1.2 Excess Liability Insurance

13.1.2.1 Contractor may procure and maintain, during the life of this Contract, an Excess Liability Insurance Policy to meet the policy limit requirements of the required policies if Contractor's underlying policy limits are less than required.

13.1.2.2 There shall be no gap between the per occurrence amount of any underlying policy and the start of the coverage under the Excess Liability Insurance Policy. Any Excess Liability Insurance Policy shall be written on a following form and shall protect Contractor, District, State, Construction Manager(s), Project Manager(s), and Architect(s) in amounts and including the provisions as set forth in the Supplementary Conditions (if any) and/or Special Conditions, and that complies with all requirements for Commercial General Liability and Automobile Liability and Employers' Liability Insurance.

13.1.3 Subcontractor(s): Contractor shall require its Subcontractor(s), if any, to procure and maintain Commercial General Liability Insurance, Automobile Liability Insurance, and Excess Liability Insurance (if Subcontractor elects to satisfy, in part the insurance required herein by procuring and maintaining an Excess Liability Insurance Policy) with forms of coverage and limits equal to the amounts required of the Contractor.

13.1.4 Workers' Compensation and Employers' Liability Insurance

13.1.4.1 In accordance with provisions of section 3700 of the California Labor Code, the Contractor and every Subcontractor shall be required to secure the payment of compensation to its employees.

13.1.4.2 Contractor shall procure and maintain, during the life of this Contract, Workers' Compensation Insurance and Employers' Liability Insurance for all of its employees engaged in work under this Contract, on/or at the Site of the Project. This coverage shall cover, at a minimum, medical and surgical treatment, disability benefits, rehabilitation therapy, and survivors' death benefits. Contractor shall require its Subcontractor(s), if any, to procure and maintain Workers' Compensation Insurance and Employers' Liability Insurance for all employees of Subcontractor(s). Any class of employee or employees not covered by a Subcontractor's insurance shall be covered by Contractor's insurance. If any class of employee or employee engaged in Work under this Contract, on or at the Site of the Project, is not protected under the Workers' Compensation Insurance, Contractor shall provide, or shall cause a Subcontractor to provide, adequate insurance coverage for the protection of any employee(s) not otherwise protected before any of those employee(s) commence work.

13.1.5 Builder's Risk Insurance: Builder's Risk "All Risk" Insurance

Contractor shall procure and maintain, during the life of this Contract, Builder's Risk (Course of Construction), or similar first party property coverage acceptable to the District, issued on a replacement cost value basis. The cost shall be consistent with the total replacement cost of all insurable Work of the Project included within the Contract Documents. Coverage is to insure against all risks of accidental physical loss and shall include without limitation the perils of vandalism and/or malicious mischief (both without any limitation regarding vacancy or occupancy), sprinkler leakage, civil authority, theft, sonic disturbance, earthquake, flood, collapse, wind, rain, dust, fire, war, terrorism, lightning, smoke, and rioting. Coverage shall include debris removal, demolition, increased costs due to enforcement of all applicable ordinances and/or laws in the repair and replacement of damaged and undamaged portions of the property, and reasonable costs for the Architect's and engineering services and expenses required as a result of any insured loss upon the Work and

Project, including completed Work and Work in progress, to the full insurable value thereof.

13.1.6 Pollution Liability Insurance

13.1.6.1 Contractor shall procure and maintain Pollution Liability Insurance that shall protect Contractor, District, State, Construction Manager(s), Project Inspector(s), and Architect(s) from all claims for bodily injury, property damage, including natural resource damage, cleanup costs, removal, storage, disposal, and/or use of the pollutant arising from operations under this Contract, and defense, including costs and expenses incurred in the investigation, defense, or settlement of claims. Coverage shall apply to sudden and/or gradual pollution conditions resulting from the escape or release of smoke, vapors, fumes, acids, alkalis, toxic chemicals, liquids, or gases, natural gas, waste materials, or other irritants, contaminants, or pollutants, including asbestos. This coverage shall be provided in a form at least as broad as Insurance Services (ISO) Form CG 2415, or Contractor shall procure and maintain these coverages separately.

13.1.6.2 Contractor shall warrant that any retroactive date applicable to coverage under the policy predates the effective date of the Contract and that continuous coverage will be maintained or an extended reporting or discovery period will be exercised for a period of three (3) years, beginning from the time that the Work under the Contract is completed.

13.1.6.3 If Contractor is responsible for removing any pollutants from a site, then Contractor shall ensure that Any Auto, including owned, non-owned, and hired, are included within the above policies and at the required limits, to cover its automobile exposure from transporting the pollutants from the site to an approved disposal site. This coverage shall include the Motor Carrier Act Endorsement, MCS 90.

13.1.7 Proof of Carriage of Insurance and Other Requirements: Endorsements and Certificates

13.1.7.1 Contractor shall not commence Work nor shall it allow any Subcontractor to commence Work under this Contract, until Contractor and its Subcontractor(s) have procured all required insurance and Contractor has delivered in duplicate to the District complete endorsements (or entire insurance policies) and certificates indicating the required coverages have been obtained, and the District has approved these documents.

13.1.7.2 Endorsements, certificates, and insurance policies shall include the following:

13.1.7.2.1 A clause stating:

"This policy shall not be amended, canceled or modified and the coverage amounts shall not be reduced until notice has been mailed to District, Architect, and Construction Manager stating date of amendment, modification, cancellation or reduction. Date of amendment, modification, cancellation or reduction may not be less than thirty (30) days after date of mailing notice."

13.1.7.2.2 Language stating in particular those insured, extent of insurance, location and operation to which insurance applies, expiration date, to whom cancellation and reduction notice will be sent, and length of notice period.

13.1.7.3 All endorsements, certificates and insurance policies shall state that District, its trustees, employees and agents, the State of California, Construction Manager(s), Project Manager(s), Inspector(s) and Architect(s) are named additional insureds under all policies except Workers' Compensation Insurance and Employers' Liability Insurance.

13.1.7.4 Insurance written on a "claims made" basis is to be renewed by the Contractor and all Subcontractors for a period of five (5) years following completion of the Work or termination of this Agreement. Such insurance must have the same coverage and limits as the policy that was in effect during the term of this Agreement, and will cover the Contractor and all Subcontractors for all claims made.

13.1.7.5 Contractor's and Subcontractors' insurance policy(s) shall be primary and non-contributory to any insurance or self-insurance maintained by District, its trustees, employees and/or agents, the State of California, Construction Manager(s), Project Manager(s), Inspector(s), and/or Architect(s).

13.1.7.6 All endorsements shall waive any right to subrogation against any of the named additional insureds.

13.1.7.7 Unless otherwise stated in the Special Conditions, all of Contractor's insurance shall be with insurance companies with an A.M. Best rating of no less than **A: VII**.

13.1.7.8 The insurance requirements set forth herein shall in no way limit the Contractor's liability arising out of or relating to the performance of the Work or related activities.

13.1.7.9 Failure of Contractor and/or its Subcontractor(s) to comply with the insurance requirements herein shall be deemed a material breach of the Agreement.

13.1.8 Insurance Policy Limits

Unless different limits are indicated in the Special Conditions, the limits of insurance shall not be less than the following amounts:

Commercial General Liability	Product Liability and Completed Operations, Fire Damage Liability – Split Limit	\$2,000,000 per occurrence; \$4,000,000 aggregate
Automobile Liability – Any Auto	Combined Single Limit	\$1,000,000

Workers Compensation		Statutory limits pursuant to State law
Employers' Liability		\$1,000,000
Builder's Risk (Course of Construction)		Issued for the value and scope of Work indicated herein.
Pollution Liability		\$1,000,000 per claim; \$2,000,000 aggregate

13.2 Contract Security - Bonds

13.2.1 Contractor shall furnish two surety bonds issued by a California admitted surety insurer as follows:

13.2.1.1 Performance Bond: A bond in an amount at least equal to one hundred percent (100%) of Contract Price as security for faithful performance of this Contract.

13.2.1.2 Payment Bond: A bond in an amount at least equal to one hundred percent (100%) of the Contract Price as security for payment of persons performing labor and/or furnishing materials in connection with this Contract.

13.2.2 Cost of bonds shall be included in the Bid and Contract Price.

13.2.3 All bonds related to this Project shall be in the forms set forth in these Contract Documents and shall comply with all requirements of the Contract Documents, including, without limitation, the bond forms.

14. WARRANTY/GUARANTEE/INDEMNITY

14.1 Warranty/Guarantee

14.1.1 The Contractor shall obtain and preserve for the benefit of the District, manufacturer's warranties on materials, fixtures, and equipment incorporated into the Work.

14.1.2 In addition to guarantees required elsewhere, Contractor shall, and hereby does guarantee and warrant all Work furnished on the job against all defects for a period of **TWO (2)** years after the later of the following dates, unless a longer period is provided for in the Contract Documents:

14.1.2.1 The acceptance by the District, or its agent, of the Work, subject to these General Conditions, or

14.1.2.2 The date that commissioning for the Project, if any, was completed.

At the District's sole option, Contractor shall repair or replace any and all of that Work, together with any other Work that may be displaced in so doing, that may prove defective in workmanship and/or materials within a **TWO (2)** years period from date of completion as defined above, unless a longer period is provided for in the Contract Documents, without expense whatsoever to District. In the event of failure of Contractor and/or Surety to commence and pursue with diligence said replacements or repairs within ten (10) days after being notified in writing, Contractor and Surety hereby acknowledge and agree that District is authorized to proceed to have defects repaired and made good at expense of Contractor and/or Surety who hereby agree to pay costs and charges therefore immediately on demand.

14.1.3 If, in the opinion of District, defective work creates a dangerous condition or requires immediate correction or attention to prevent further loss to District or to prevent interruption of operations of District, District will attempt to give the notice required above. If Contractor or Surety cannot be contacted or neither complies with District's request for correction within a reasonable time as determined by District, District may, notwithstanding the above provision, proceed to make any and all corrections and/or provide attentions the District believes are necessary. The costs of correction or attention shall be charged against Contractor and Surety of the guarantees provided in this Article or elsewhere in this Contract.

14.1.4 The above provisions do not in any way limit the guarantees on any items for which a longer guarantee is specified or on any items for which a manufacturer gives a guarantee for a longer period. Contractor shall furnish to District all appropriate guarantee or warranty certificates as indicated in the Specifications or upon request by District.

14.1.5 Nothing herein shall limit any other rights or remedies available to District.

14.2 Indemnity and Defense

14.2.1 To the furthest extent permitted by California law, the Contractor shall indemnify, keep and hold harmless the District, the Architect, and the Construction Manager, their consultants and separate contractors, and their respective board members, officers, representatives, contractors, agents, and employees, in both individual and official capacities ("Indemnitees"), against all suits, claims, damages, losses, and expenses, including but not limited to attorney's fees, caused by, arising out of, resulting from, or incidental to, the performance of the Work under this Contract by the Contractor, its Subcontractors, vendors, or suppliers, except to the extent caused by the sole negligence, active negligence, or willful misconduct of the Indemnitees, and/or to any extent that would render these provisions void or unenforceable. This agreement and obligation of the Contractor shall not be construed to negate, abridge, or otherwise reduce any right or obligation of indemnity that would otherwise exist as to any party or person described herein. This indemnification, and hold harmless obligation includes any failure or alleged failure by Contractor to comply with any provision of law, any failure or alleged failure to timely and properly fulfill all of its obligations under the Contract Documents in strict accordance with their terms, and without limitation, any failure or alleged failure of Contractor's obligations regarding any stop payment notice actions or liens, including Civil Wage and Penalty Assessments and/or Orders by the California Department of Industrial Relations. Contractor shall also defend, at its own expense, Indemnitees with legal counsel reasonably acceptable to the District,

against all suits, claims, allegations, damages, losses, and expenses, including but not limited attorneys' fees, caused by, arising out of, resulting from, or incidental to, the performance of the Work under this Contract by the Contractor, its Subcontractors, vendors, or suppliers, except to the extent caused by the sole negligence, active negligence, or willful misconduct of the Indemnitees, and/or to any extent that would render these provisions void or unenforceable. This obligation of defense is inclusive of fees and costs. This agreement and obligation of the Contractor shall not be construed to negate, abridge, or otherwise reduce any right or obligation of defense that would otherwise exist as to any party or person described herein. This defense obligation extends to any failure or alleged failure by Contractor to comply with any provision of law, any failure or alleged failure to timely and properly fulfill all of its obligations under the Contract Documents in strict accordance with their terms, and without limitation, any failure or alleged failure of Contractor's obligations regarding any stop payment notice actions or liens, including Civil Wage and Penalty Assessments and/or Orders by the California Department of Industrial Relations. The Contractor shall give prompt notice to the District in the event of any injury (including death), loss, or damage included herein. Without limitation of the provisions herein, if the Contractor's agreement to indemnify and hold harmless the Indemnitees or its agreement to defend Indemnitees as provided herein shall be determined to be void or unenforceable, in whole or in part, it is the intention of the parties that these circumstances shall not otherwise affect the validity or enforceability of the Contractor's agreement to indemnify, defend, and hold harmless the rest of the Indemnitees, as provided herein. Further, the Contractor shall be and remain fully liable on its agreements and obligations herein to the fullest extent permitted by law.

14.2.2 In any and all claims against any of the Indemnitees by any employee of the Contractor, any Subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, the Contractor's indemnification obligation herein shall not be limited in any way by any limitation on the amount or type of damages, compensation, or benefits payable by or for the Contractor or any Subcontractor under workers' compensation acts, disability benefit acts, or other employee benefit acts.

14.2.3 The District may retain so much of the moneys due the Contractor as shall be considered necessary, until disposition of any such suit, claims or actions for damages or until the District, Architect and Construction Manager have received written agreement from the Contractor that they will unconditionally defend the District, Architect and Construction Manager, their officers, agents and employees, and pay any damages due by reason of settlement or judgment.

14.2.4 The defense and indemnification obligations hereunder shall survive the completion of Work, including the warranty/guarantee period, and/or the termination of the Agreement.

15. TIME

15.1 Notice to Proceed

15.1.1 District may issue a Notice to Proceed within ninety (90) days from the date of the Notice of Award. Once Contractor has received the Notice to Proceed, Contractor shall complete the Work within the period of time indicated in the Contract Documents.

15.1.2 In the event that the District desires to postpone issuing the Notice to Proceed beyond ninety (90) days from the date of the Notice of Award, it is expressly understood that with reasonable notice to the Contractor, the District may postpone issuing the Notice to Proceed. It is further expressly understood by Contractor that Contractor shall not be entitled to any claim of additional compensation as a result of the postponement of the issuance of the Notice to Proceed.

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

15.2 Computation of Time / Adverse Weather

15.2.1 The Contractor will only be allowed a time extension for Adverse Weather conditions if requested by Contractor in compliance with the time extension request procedures and only if all of the following conditions are met:

15.2.1.1 The weather conditions constitute Adverse Weather, as defined herein and further specified in the Special Conditions;

15.2.1.2 Contractor can verify that the Adverse Weather caused delays in excess of five hours of the indicated labor required to complete the scheduled tasks of Work on the day affected by the Adverse Weather;

15.2.1.3 The Contractor's crew is dismissed as a result of the Adverse Weather;

15.2.1.4 Said delay adversely affects the critical path in the Construction Schedule; and

15.2.1.5 The number of days of delay for the month exceeds those indicated in the Special Conditions.

15.2.2 If the aforementioned conditions are met, a non-compensable day-for-day extension will only be allowed for those days in excess of those indicated in the Special Conditions.

15.2.3 The Contractor shall work seven (7) days per week, if necessary, irrespective of inclement weather, to maintain access and the Construction Schedule, and to protect the Work under construction from the effects of Adverse Weather, all at no further cost to the District.

15.2.4 The Contract Time has been determined with consideration given to the average climate weather conditions prevailing in the County in which the Project is located.

15.3 Hours of Work

15.3.1 Sufficient Forces

Contractor and Subcontractors shall continuously furnish sufficient and competent work forces with the required levels of familiarity with the Project and skill, training and experience to ensure the prosecution of the Work in accordance with the Construction Schedule.

15.3.2 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.

15.4 Progress and Completion

15.4.1 Time of the Essence

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

15.4.2 No Commencement Without Insurance or Bonds

The Contractor shall not commence operations on the Project or elsewhere prior to the effective date of insurance and bonds. The date of commencement of the Work shall not be changed by the effective date of such insurance or bonds. If Contractor commences Work without insurance and bonds, all Work is performed at Contractor's peril and shall not be compensable until and unless Contractor secures bonds and insurance pursuant to the terms of the Contract Documents and subject to District claim for damages.

15.5 Schedule

Contractor shall provide to District, Construction Manager, and Architect a schedule in conformance with the Contract Documents and as required in the Notice to Proceed and the Contractor's Submittals and Schedules section of these General Conditions.

15.6 Expeditious Completion

The Contractor shall proceed expeditiously with adequate forces and shall achieve Completion within the Contract Time.

16. EXTENSIONS OF TIME – LIQUIDATED DAMAGES

16.1 Liquidated Damages

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

Documents, it is understood that the District will suffer damage. It being impractical and unfeasible to determine the amount of actual damage, it is agreed the Contractor shall pay to District as fixed and liquidated damages, and not as a penalty, the amount set forth in the Agreement for each calendar day of delay in completion. Contractor and its Surety shall be liable for the amount thereof pursuant to Government Code section 53069.85.

16.2 Excusable Delay

16.2.1 Contractor shall not be charged for liquidated damages because of any delays in completion of Work which are not the fault of Contractor or its Subcontractors, including acts of God as defined in Public Contract Code section 7105, acts of enemy, epidemics, and quarantine restrictions. Contractor shall, within five (5) calendar days of beginning of any delay, notify District in writing of causes of delay including documentation and facts explaining the delay and the direct correlation between the cause and effect. District shall review the facts and extent of any delay and shall grant extension(s) of time for completing Work when, in its judgment, the findings of fact justify an extension. Extension(s) 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 if Contractor has timely submitted the Construction Schedule as required herein.

16.2.2 Contractor shall notify the District pursuant to the claims provisions in these General Conditions of any anticipated delay and its cause. Following submission of a claim, the District 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.

16.2.3 In the event the Contractor requests an extension of Contract Time for unavoidable delay, such request shall be submitted in accordance with the provisions in the Contract Documents governing changes in Work. When requesting time, requests must be submitted with full justification and documentation. If the Contractor fails to submit justification, it waives its right to a time extension at a later date. Such justification must be based on the official Construction Schedule as updated at the time of occurrence of the delay or execution of Work related to any changes to the Scope of Work. Any claim for delay must include the following information as support, without limitation:

16.2.3.1 The duration of the activity relating to the changes in the Work and the resources (manpower, equipment, material, etc.) required to perform the activities within the stated duration.

16.2.3.2 Specific logical ties to the Contract Schedule for the proposed changes and/or delay showing the activity/activities in the Construction Schedule that are affected by the change and/or delay. In particular, Contractor must show an actual impact to the schedule, after making a good faith effort to mitigate the delay by rescheduling the work, by providing an analysis of the schedule ("Schedule Analysis"). Such Schedule Analysis shall describe in detail the cause and effect of the delay and the impact on the critical dates in the Project schedule. (A portion of any delay of seven (7) days or more must be provided.)

16.2.3.3 A recovery schedule must be submitted within twenty (20) calendar days of written notification to the District of causes of delay.

16.3 No Additional Compensation for Delays Within Contractor's Control

16.3.1 Contractor is aware that governmental agencies, including, without limitation, the Division of the State Architect, the Department of General Services, gas companies, electrical utility companies, water districts, and other agencies may have to approve Contractor-prepared drawings or approve a proposed installation. Accordingly, Contractor shall include in its bid, time for possible review of its drawings and for reasonable delays and damages that may be caused by such agencies. Thus, Contractor is not entitled to make a claim for damages or delays arising from the review of Contractor's drawings.

16.3.2 Contractor shall only be entitled to compensation for delay when all of the following conditions are met:

16.3.2.1 The District is responsible for the delay;

16.3.2.2 The delay is unreasonable under the circumstances involved;

16.3.2.3 The delay was not within the contemplation of the District and Contractor; and

16.3.2.4 Contractor timely complies with the claims procedure of the Contract Documents.

16.4 Float or Slack in the Schedule

Float or slack is the amount of time between the early start date and the late start date, or the early finish date and the late finish date, of any of the activities in the schedule. Float or slack is not for the exclusive use of or benefit of either the District or the Contractor, but its use shall be determined solely by the District.

17. CHANGES IN THE WORK

17.1 No Changes Without Authorization

17.1.1 There shall be no change whatsoever in the Drawings, Specifications, or in the Work without an executed Change Order or a written Construction Change Directive authorized by the District as herein provided. District shall not be liable for the cost of any extra work or any substitutions, changes, additions, omissions, or deviations from the Drawings and Specifications unless the District's governing board has authorized the same and the cost thereof has been approved in writing by Change Order or Construction Change Directive in advance of the changed Work being performed. 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 or Construction Change Directive. Contractor shall be responsible for any costs incurred by the District for professional services and DSA fees and/or delay to the Project Schedule, if any, for DSA to review any request for changes to the DSA approved plans and specifications for the convenience of the Contractor and/or to accommodate the Contractor's means and methods. 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.

17.1.2 Contractor shall perform immediately all work that has been authorized by a fully executed Change Order or Construction Change Directive. Contractor shall be fully responsible for any and all delays and/or expenses caused by Contractor's failure to expeditiously perform this Work.

17.1.3 Should any Change Order result in an increase in the Contract Price or extend the Contract Time, the cost of or length of extension in that Change Order shall be agreed to, in writing, by the District in advance of the Work by Contractor, and shall be subject to the monetary limitations set forth in Public Contract Code section 20118.4. In the event that Contractor proceeds with any change in Work without a Change Order executed by the District or Construction Change Directive, Contractor waives any claim of additional compensation or time for that additional work. Under no circumstances shall Contractor be entitled to any claim of additional compensation or time not expressly requested by Contractor in a Proposed Change Order or approved by District in an executed Change Order.

17.1.4 Contractor understands, acknowledges, and agrees that the reason for District authorization 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 a change in Work becomes unnecessary.

17.2 Architect Authority

The Architect will have authority to order minor changes in the Work not involving any adjustment in the Contract Price, or an extension of the Contract Time, or a change that is inconsistent with the intent of the Contract Documents. These changes shall be effected by written Change Order, Construction Change Directive, by Architect's response(s) to RFI(s), or by Architect's Supplemental Instructions ("ASI").

17.3 Change Orders

17.3.1 A Change Order is a written instrument prepared and issued by the District and/or the Architect and signed by the District (as authorized by the District's Board of Trustees), the Contractor, the Architect, and approved by the Project Inspector (if necessary) and DSA (if necessary), stating their agreement regarding all of the following:

17.3.1.1 A description of a change in the Work;

17.3.1.2 The amount of the adjustment in the Contract Price, if any; and

17.3.1.3 The extent of the adjustment in the Contract Time, if any.

17.4 Construction Change Directives

17.4.1 A Construction Change Directive is a written order prepared and issued by the District, the Construction Manager, and/or the Architect and signed by the District and the Architect, directing a change in the Work. The District may as provided by law, by Construction Change Directive and without invalidating the Contract, order changes in the Work consisting of additions, deletions, or other revisions. The adjustment to the Contract Price or Time, if any, is subject to the provisions of this section regarding Changes in the Work. If all or a portion of the Project is being funded by funds requiring approval by the State Allocation Board

("SAB"), these revisions may be subject to compensation once approval of same is received and funded by the SAB, and funds are released by the Office of Public School Construction ("OPSC"). Any dispute as to the adjustment in the Contract Price, if any, of the Construction Change Directive or timing of payment shall be resolved pursuant to the Payment and Claims and Disputes provisions herein.

17.4.2 The District may issue a Construction Change Directive in the absence of agreement on the terms of a Change Order.

17.5 Force Account Directives

17.5.1 When work, for which a definite price has not been agreed upon in advance, is to be paid for on a force account basis, all direct costs necessarily incurred and paid by the Contractor for labor, material, and equipment used in the performance of that Work, shall be subject to the approval of the District and compensation will be determined as set forth herein.

17.5.2 The District will issue a Force Account Directive to proceed with the Work on a force account basis, and a not-to-exceed budget will be established by the District.

17.5.3 All requirements regarding direct cost for labor, labor burden, material, equipment, and markups on direct costs for overhead and profit described in this section shall apply to Force Account Directives. However, the District will only pay for actual costs verified in the field by the District or its authorized representative(s) on a daily basis.

17.5.4 The Contractor shall be responsible for all cost related to the administration of Force Account Directive. The markup for overhead and profit for Contractor modifications shall be full compensation to the Contractor to administer Force Account Directive, and Contractor shall not be entitled to separately recover additional amounts for overhead and/or profit.

17.5.5 The Contractor shall notify the District or its authorized representative(s) at least twenty-four (24) hours prior to proceeding with any of the force account work. Furthermore, the Contractor shall notify the District when it has consumed eighty percent (80%) of the budget, and shall not exceed the budget unless specifically authorized in writing by the District. The Contractor will not be compensated for force account work in the event that the Contractor fails to timely notify the District regarding the commencement of force account work, or exceeding the force account budget.

17.5.6 The Contractor shall diligently proceed with the work, and on a daily basis, submit a daily force account report on a form supplied by the District no later than 5:00 p.m. each day. The report shall contain a detailed itemization of the daily labor, material, and equipment used on the force account work only. The names of the individuals performing the force account work shall be included on the daily force account reports. The type and model of equipment shall be identified and listed. The District will review the information contained in the reports, and sign the reports no later than the next work day, and return a copy of the report to the Contractor for their records. The District will not sign, nor will the Contractor receive compensation for work the District cannot verify. The Contractor will provide a weekly force account summary indicating the status of each Force Account Directive in terms of

percent complete of the not-to-exceed budget and the estimated percent complete of the work.

17.5.7 In the event the Contractor and the District reach a written agreement on a set cost for the work while the work is proceeding based on a Force Account Directive, the Contractor's signed daily force account reports shall be discontinued and all previously signed reports shall be invalid.

17.6 Price Request

17.6.1 Definition of Price Request

A Price Request ("PR") is a written request prepared by the Architect requesting the Contractor to submit to the District and the Architect an estimate of the effect of a proposed change in the Work on the Contract Price and the Contract Time.

17.6.2 Scope of Price Request

A Price Request shall contain adequate information, including any necessary Drawings and Specifications, to enable Contractor to provide the cost breakdowns required herein. The Contractor shall not be entitled to any additional compensation for preparing a response to a Price Request, whether ultimately accepted or not.

17.7 Proposed Change Order

17.7.1 Definition of Proposed Change Order

A Proposed Change Order ("PCO") is a written request prepared by the Contractor requesting that the District and the Architect issue a Change Order based upon a proposed change to the Work.

17.7.2 Changes in Contract Price

A PCO shall include breakdowns and backup documentation pursuant to the revisions herein and sufficient, in the District's judgment, to validate any change in Contract Price. In no case shall Contractor or any of its Subcontractors be permitted to reserve rights for additional compensation for Change Order Work.

17.7.3 Changes in Time

A PCO shall also include any changes in 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 Construction Schedule as defined in the Contract Documents. If Contractor fails to request a time extension in a PCO, then the Contractor is thereafter precluded from requesting, and waives any right to request, additional time and/or claim a delay. In no case shall Contractor or any of its Subcontractors be permitted to reserve rights for additional time for Change Order Work. A PCO that leaves the amount of time requested blank, or states that such time requested is "to be determined", is not permitted and shall also constitute a waiver of any right to request additional time and/or claim a delay.

17.7.4 Unknown and/or Unforeseen Conditions

If Contractor submits a PCO requesting an increase in Contract Price and/or Contract Time that is based at least partially on Contractor's assertion that Contractor has encountered unknown and/or unforeseen condition(s) on the Project, then Contractor shall base the PCO on provable information that, beyond a reasonable doubt and to the District's satisfaction, demonstrates that the unknown and/or unforeseen condition(s) were actually unknown and/or unforeseen and that the condition(s) were reasonably unknown and/or unforeseen. If not, the District shall deny the PCO as unsubstantiated, and the Contractor shall complete the Project without any increase in Contract Price and/or Contract Time based on that PCO.

17.7.5 Proposed Change Order Certification

In submitting a PCO, Contractor certifies and affirms that the cost and/or time request is submitted in good faith, that the cost and/or time request is accurate and in accordance with the provisions of the Contract Documents, and the Contractor submits the cost and/or request for extension of time recognizing the significant civil penalties and treble damages which follow from making a false claim or presenting a false claim under Government Code section 12650, *et seq.*

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17.8 Format for Proposed Change Order

17.8.1 The following format shall be used as applicable by the District and the Contractor (e.g. Change Orders, PCO's) to communicate proposed additions and deductions to the Contract, supported by attached documentation. Any spaces left blank will be deemed no change to cost or time.

	<u>WORK PERFORMED OTHER THAN BY CONTRACTOR</u>	<u>ADD</u>	<u>DEDUCT</u>
(a)	<u>Material</u> (attach suppliers' invoice or itemized quantity and unit cost plus sales tax)		
(b)	<u>Add Labor</u> (attach itemized hours and rates, fully encumbered)		
(c)	<u>Add Equipment</u> (attach suppliers' invoice)		
(d)	<u>Subtotal</u>		
(e)	<u>Add overhead and profit for any and all tiers of Subcontractor</u> , the total not to exceed ten percent (10%) of Item (d)		
(f)	<u>Subtotal</u>		
(g)	<u>Add overhead and profit for Contractor</u> , not to exceed five percent (5%) of Item (f)		
(h)	<u>Subtotal</u>		
(i)	<u>Add Bond and Insurance</u> , not to exceed one and a half percent (1.5%) of Item (h)		
(j)	<u>TOTAL</u>		
(k)	<u>Time</u> (zero unless indicated; "TBD" not permitted)	_____ Calendar Days	

	<u>WORK PERFORMED BY CONTRACTOR</u>	<u>ADD</u>	<u>DEDUCT</u>
(a)	<u>Material</u> (attach itemized quantity and unit cost plus sales tax)		
(b)	<u>Add Labor</u> (attach itemized hours and rates, fully encumbered)		
(c)	<u>Add Equipment</u> (attach suppliers' invoice)		
(d)	<u>Subtotal</u>		
(e)	<u>Add overhead and profit for Contractor</u> , not to exceed fifteen percent (15%) of Item (d)		
(f)	<u>Subtotal</u>		
(g)	<u>Add Bond and Insurance</u> , not to exceed one and a half percent (1.5%) of Item (f)		
(h)	<u>TOTAL</u>		
(i)	<u>Time</u> (zero unless indicated; "TBD" not permitted)	_____ Calendar Days	

17.8.2 Labor. Contractor shall be compensated for the costs of labor actually and directly utilized in the performance of the Work. Such labor costs shall be limited to field labor for which there is a prevailing wage rate classification. Wage rates for labor shall not exceed the prevailing wage rates in the locality of the Site and shall be in the labor classification(s) necessary for the performance of the Work. Labor costs shall exclude costs incurred by the Contractor in preparing estimate(s) of

the costs of the change in the Work, in the maintenance of records relating to the costs of the change in the Work, coordination and assembly of materials and information relating to the change in the Work or performance thereof, or the supervision and other overhead and general conditions costs associated with the change in the Work or performance thereof, including but not limited to the cost for the job superintendent.

17.8.3 Materials. Contractor shall be compensated for the costs of materials necessarily and actually used or consumed in connection with the performance of the change in the Work. Costs of materials may include reasonable costs of transportation from a source closest to the Site of the Work and delivery to the Site. If discounts by material suppliers are available for materials necessarily used in the performance of the change in the Work, they shall be credited to the District. If materials necessarily used in the performance of the change in the Work are obtained from a supplier or source owned in whole or in part by the Contractor, compensation therefor shall not exceed the current wholesale price for such materials. If, in the reasonable opinion of the District, the costs asserted by the Contractor for materials in connection with any change in the Work are excessive, or if the Contractor fails to provide satisfactory evidence of the actual costs of such materials from its supplier or vendor of the same, the costs of such materials and the District's obligation to pay for the same shall be limited to the then lowest wholesale price at which similar materials are available in the quantities required to perform the change in the Work. The District may elect to furnish materials for the change in the Work, in which event the Contractor shall not be compensated for the costs of furnishing such materials or any mark-up thereon.

17.8.4 Equipment. As a precondition for the District's duty to pay for Equipment rental or loading and transportation, Contractor shall provide satisfactory evidence of the actual costs of Equipment from the supplier, vendor or rental agency of same. Contractor shall be compensated for the actual cost of the necessary and direct use of Equipment in the performance of the change in the Work. Use of such Equipment in the performance of the change in the Work shall be compensated in increments of fifteen (15) minutes. Rental time for Equipment moved by its own power shall include time required to move such Equipment to the site of the Work from the nearest available rental source of the same. If Equipment is not moved to the Site by its own power, Contractor will be compensated for the loading and transportation costs in lieu of rental time. The foregoing notwithstanding, neither moving time or loading and transportation time shall be allowed if the Equipment is used for performance of any portion of the Work other than the change in the Work. Unless prior approval in writing is obtained by the Contractor from the Architect, the Project Inspector and the District, no costs or compensation shall be allowed for time while Construction Equipment is inoperative, idle or on standby, for any reason. Contractor shall not be entitled to an allowance or any other compensation for Equipment or tools used in the performance of change in the Work where such Equipment or tools have a replacement value of \$500.00 or less. Equipment costs claimed by the Contractor in connection with the performance of any Work shall not exceed rental rates established by distributors or construction equipment rental agencies in the locality of the Site; any costs asserted which exceed such rental rates shall not be allowed or paid. Unless otherwise specifically approved in writing by the Architect, the Project Inspector and the District, the allowable rate for the use of Equipment in connection with the Work shall constitute full compensation to the Contractor for the cost of rental, fuel, power, oil, lubrication, supplies, necessary attachments, repairs or maintenance of any kind, depreciation, storage, insurance,

labor (exclusive of labor costs of the Equipment operator), and any and all other costs incurred by the Contractor incidental to the use of such Equipment.

17.9 Change Order Certification

17.9.1 All Change Orders and PCOs must include the following certification by the Contractor:

17.9.1.1 The undersigned Contractor approves the foregoing as to the changes, if any, to the Contract Price specified for each item, and as to the extension of time allowed, if any, for completion of the entire Work as stated herein, and agrees to furnish all labor, materials, and service, and perform all work necessary to complete any additional work specified for the consideration stated herein. Submission of sums which have no basis in fact or which Contractor knows are false are at the sole risk of Contractor and may be a violation of the False Claims Act set forth under Government Code section 12650 *et seq.* It is understood that the changes herein to the Contract shall only be effective when approved by the governing board of the District.

17.9.1.2 It is expressly understood that the value of the extra Work or changes expressly includes any and all of the Contractor's costs and expenses, direct and indirect, resulting from additional time required on the Project or resulting from delay to the Project. Contractor is not entitled to separately recover amounts for overhead or other indirect costs. Any costs, expenses, damages, or time extensions not included are deemed waived.

17.10 Determination of Change Order Cost

17.10.1 The amount of the increase or decrease in the Contract Price from a Change Order, if any, shall be determined in one or more of the following ways as applicable to a specific situation and at the District's discretion:

17.10.1.1 District acceptance of a PCO;

17.10.1.2 By unit prices contained in Contractor's original bid;

17.10.1.3 By agreement between District and Contractor.

17.11 Deductive Change Orders

All deductive Change Order(s) must be prepared pursuant to the provisions herein. Where a portion of the Work is deleted from the Contract, the reasonable value of the deducted work less the value of work performed shall be considered the appropriate deduction. The value submitted on the Schedule of Values shall be used to calculate the credit amount unless the bid documentation is being held in escrow as part of the Contract Documents. Unit Prices, if any, may be used in District's discretion in calculating reasonable value. If Contractor offers a proposed amount for a deductive Change Order(s), Contractor shall include a minimum of five percent (5%) total profit and overhead to be deducted with the amount of the work of the Change Order(s). If Subcontractor work is involved, Subcontractors shall also include a minimum of five percent (5%) profit and overhead to be deducted with the amount of its deducted work. Any deviation from this provision shall not be allowed.

17.12 Addition or Deletion of Alternate Bid Item(s)

If the Bid Form and Proposal includes proposal(s) for Alternate Bid Item(s), during Contractor's performance of the Work, the District may elect to add or delete any such Alternate Bid Item(s) if not included in the Contract at the time of award. If the District elects to add or delete Alternate Bid Item(s) after Contract award, the cost or credit for such Alternate Bid Item(s) shall be as set forth in the Bid Form and Proposal unless the parties agree to a different price and the Contract Time shall be adjusted by the number of days allocated in the Contract Documents. If days are not allocated in the Contract Documents, the Contract Time shall be equitably adjusted.

17.13 Discounts, Rebates, and Refunds

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

17.14 Accounting Records

With respect to portions of the Work performed by Change Orders and Construction Change Directives, the Contractor shall keep and maintain cost-accounting records satisfactory to the District, including, without limitation, Job Cost Reports as provided in these General Conditions, which shall be available to the District on the same terms as any other books and records the Contractor is required to maintain under the Contract Documents. Such records shall include without limitation hourly records for Labor and Equipment and itemized records of materials and Equipment used that day in connection with the performance of any Work. All records maintained hereunder shall be subject to inspection, review and/or reproduction by the District, the Architect or the Project Inspector upon request. In the event that the Contractor fails or refuses, for any reason, to maintain or make available for inspection, review and/or reproduction such records, the District's reasonable good faith determination of the extent of adjustment to the Contract Price shall be final, conclusive, dispositive and binding upon Contractor.

17.15 Notice Required

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

17.16 Applicability to Subcontractors

Any requirements under this Article shall be equally applicable to Change Orders or Construction Change Directives issued to Subcontractors by the Contractor to the extent as required by the Contract Documents.

17.17 Alteration to Change Order Language

Contractor shall not alter Change Orders or reserve time in Change Orders. Change Orders altered in violation of this provision, if in conflict with the terms set forth herein, shall be construed in accordance with the terms set forth herein. Contractor shall execute finalized Change Orders and proceed under the provisions herein with proper notice.

17.18 Failure of Contractor to Execute Change Order

Contractor shall be in default of the Contract if Contractor fails to execute a Change Order when the Contractor agrees with the addition and/or deletion of the Work in that Change Order.

18. REQUEST FOR INFORMATION

18.1 Any Request for Information shall reference all applicable Contract Document(s), including Specification section(s), detail(s), page number(s), drawing number(s), and sheet number(s), etc. The Contractor shall make suggestions and interpretations of the issue raised by each Request for Information. A Request for Information cannot modify the Contract Price, Contract Time, or the Contract Documents. Upon request by the District, Contractor shall provide an electronic copy of the Request for Information in addition to the hard copy.

18.2 The Contractor shall be responsible for any costs incurred for professional services that District may deduct from any amounts owing to the Contractor, if a Request for Information requests an interpretation or decision of a matter where the information sought is equally available to the party making the request. District, at its sole discretion, shall deduct from and/or invoice Contractor for all the professional services arising herein.

19. PAYMENTS

19.1 Contract Price

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

19.2 Applications for Progress Payments

19.2.1 Procedure for Applications for Progress Payments

19.2.1.1 Application for Progress Payment

19.2.1.1.1 Not before the fifth (5th) day of each calendar month during the progress of the Work, Contractor shall submit to the District and the Architect an itemized Application for Payment for operations completed in accordance with the Schedule of Values. Such application shall be notarized, if required, and supported by the following or each portion thereof unless waived by the District in writing:

19.2.1.1.1.1 The amount paid to the date of the Application to the Contractor, to all its Subcontractors, and all others furnishing labor, material, or equipment for its Contract;

19.2.1.1.1.2 The amount being requested under the Application for Payment by the Contractor on its own behalf and separately stating the amount requested on behalf of each of the Subcontractors and all others furnishing labor, material, and equipment under the Contract;

19.2.1.1.1.3 The balance that will be due to each of such entities after said payment is made;

19.2.1.1.1.4 A certification that the As-Built Drawings and annotated Specifications are current;

19.2.1.1.1.5 Itemized breakdown of work done for the purpose of requesting partial payment;

19.2.1.1.1.6 An updated and acceptable construction schedule in conformance with the provisions herein;

19.2.1.1.1.7 The additions to and subtractions from the Contract Price and Contract Time;

19.2.1.1.1.8 A total of the retentions held;

19.2.1.1.1.9 Material invoices, evidence of equipment purchases, rentals, and other support and details of cost as the District may require from time to time;

19.2.1.1.1.10 The percentage of completion of the Contractor's Work by line item;

19.2.1.1.1.11 Schedule of Values updated from the preceding Application for Payment;

19.2.1.1.1.12 A duly completed and executed conditional waiver and release upon progress payment compliant with Civil Code section 8132 from the Contractor and each subcontractor of any tier and supplier to be paid from the current progress payment;

19.2.1.1.1.13 A duly completed and executed unconditional waiver and release upon progress payment compliant with Civil Code section 8134 from the Contractor and each subcontractor of any tier and supplier that was paid from the previous progress payment(s); and

19.2.1.1.1.14 A certification by the Contractor of the following:

The Contractor warrants title to all Work performed as of the date of this payment application has been completed in accordance with the Contract Documents for the Project. The Contractor further warrants that all amounts have been paid for work which previous Certificates for Payment were issued and payments received and all Work performed as of the date of this payment application is free and clear of liens, claims, security interests, or encumbrances in favor of the Contractor, Subcontractors, material and equipment suppliers, workers, or other persons or entities making a claim by reason of having provided labor, materials, and equipment relating to the Work, except those of which the District has been informed. Submission of sums which have no basis in fact or which Contractor knows are false are at the sole risk of Contractor and may be a violation of the False Claims Act set forth under Government Code section 12650 *et seq.*

19.2.1.1.1.15 The Contractor shall be subject to the False Claims Act set forth in Government Code section 12650 *et seq.* for information provided with any Application for Progress Payment.

19.2.1.1.1.16 All remaining certified payroll records ("CPR(s)") for each journeyman, apprentice, worker, or other employee employed by the Contractor and/or each Subcontractor in connection with the Work for the period of the Application for Payment. As indicated herein, the District shall not make any payment to Contractor until:

19.2.1.1.1.16.1 Contractor and/or its Subcontractor(s) provide electronic CPRs weekly for all weeks any journeyman, apprentice, worker or other employee was employed in connection with the Work directly to the DIR, or within ten (10) days of any request by the District or the DIR, and

19.2.1.1.1.16.2 Any delay in Contractor and/or its Subcontractor(s) providing CPRs in a timely manner may directly delay the Contractor's payment.

19.2.2 Prerequisites for Progress Payments

19.2.2.1 First Payment Request: The following items, if applicable, must be completed before the District will accept and/or process the Contractor's first payment request:

19.2.2.1.1 Installation of the Project sign;

19.2.2.1.2 Installation of field office;

19.2.2.1.3 Installation of temporary facilities and fencing;

19.2.2.1.4 Schedule of Values;

19.2.2.1.5 Contractor's Construction Schedule;

- 19.2.2.1.6** Schedule of unit prices, if applicable;
- 19.2.2.1.7** Submittal Schedule;
- 19.2.2.1.8** Receipt by Architect of all submittals due as of the date of the payment application;
- 19.2.2.1.9** Copies of necessary permits;
- 19.2.2.1.10** Copies of authorizations and licenses from governing authorities;
- 19.2.2.1.11** Initial progress report;
- 19.2.2.1.12** Surveyor qualifications;
- 19.2.2.1.13** Written acceptance of District's survey of rough grading, if applicable;
- 19.2.2.1.14** List of all Subcontractors, with names, license numbers, telephone numbers, and Scope of Work;
- 19.2.2.1.15** All bonds and insurance endorsements; and
- 19.2.2.1.16** Resumes of Contractor's project manager, and if applicable, job site secretary, record documents recorder, and job site superintendent.

19.2.2.2 Second Payment Request: The District will not process the second payment request until and unless all submittals and Shop Drawings have been accepted for review by the Architect.

19.2.2.3 No Waiver of Criteria: Any payments made to Contractor where criteria set forth herein have not been met shall not constitute a waiver of said criteria by District. Instead, such payment shall be construed as a good faith effort by District to resolve differences so Contractor may pay its Subcontractors and suppliers. Contractor agrees that failure to submit such items may constitute a breach of contract by Contractor and may subject Contractor to termination.

19.3 Progress Payments

19.3.1 District's Approval of Application for Payment

19.3.1.1 Upon receipt of an Application for Payment, The District shall act in accordance with both of the following:

19.3.1.1.1 Each Application for Payment shall be reviewed by the District as soon as practicable after receipt for the purpose of determining that the Application for Payment is a proper Application for Payment.

19.3.1.1.2 Any Application for Payment determined not to be a proper Application for Payment suitable for payment shall be returned to the Contractor as soon as practicable, but not later than seven (7) days, after receipt. An Application for Payment returned pursuant to this paragraph shall

be accompanied by a document setting forth in writing the reasons why the Application for Payment is not proper. The number of days available to the District to make a payment without incurring interest pursuant to this section shall be reduced by the number of days by which the District exceeds this seven-day return requirement.

19.3.1.1.3 An Application for Payment shall be considered properly executed if funds are available for payment of the Application for Payment, and payment is not delayed due to an audit inquiry by the financial officer of the District.

19.3.1.2 The District's review of the Contractor's Application for Payment will be based on the District's and the Architect's observations at the Site and the data comprising the Application for Payment that the Work has progressed to the point indicated and that, to the best of the District's and the Architect's knowledge, information, and belief, the quality of the Work is in accordance with the Contract Documents. The foregoing representations are subject to:

19.3.1.2.1 Observation of the Work for general conformance with the Contract Documents,

19.3.1.2.2 Results of subsequent tests and inspections,

19.3.1.2.3 Minor deviations from the Contract Documents correctable prior to completion, and

19.3.1.2.4 Specific qualifications expressed by the Architect.

19.3.1.3 District's approval of the certified Application for Payment shall be based on Contractor complying with all requirements for a fully complete and valid certified Application for Payment.

19.3.2 Payments to Contractor

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

19.3.2.2 The Contractor shall not be entitled to have any payment requests processed, or be entitled to have any payment made for Work performed, so long as any lawful or proper direction given by the District concerning the Work, or any portion thereof, remains incomplete.

19.3.2.3 If the District fails to make any progress payment within thirty (30) days after receipt of an undisputed and properly submitted Application for Payment from the Contractor, the District shall pay interest to the Contractor

equivalent to the legal rate set forth in subdivision (a) of Section 685.010 of the Code of Civil Procedure.

19.3.3 No Waiver

No payment by District hereunder shall be interpreted so as to imply that District has inspected, approved, or accepted any part of the Work. Notwithstanding any payment, the District may enforce each and every provision of this Contract. The District may correct or require correction of any error subsequent to any payment.

19.4 Decisions to Withhold Payment

19.4.1 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 herein 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 any of the following:

19.4.1.1 Defective Work not remedied within **FORTY-EIGHT (48)** hours of written notice to Contractor.

19.4.1.2 Stop Payment Notices or other liens served upon the District as a result of the Contract. Contractor agrees that the District may withhold up to 125% of the amount claimed in the Stop Payment Notice to answer the claim and to provide for the District's reasonable cost of any litigation pursuant to the stop payment notice.

19.4.1.3 Liquidated damages assessed against the Contractor.

19.4.1.4 The cost of completion of the Contract if there exists a reasonable doubt that the Work can be completed for the unpaid balance of the Contract Price or by the completion date.

19.4.1.5 Damage to the District or other contractor(s).

19.4.1.6 Unsatisfactory prosecution of the Work by the Contractor.

19.4.1.7 Failure to store and properly secure materials.

19.4.1.8 Failure of the Contractor to submit, on a timely basis, proper, sufficient, and acceptable documentation required by the Contract Documents, including, without limitation, a Construction Schedule, Schedule of Submittals, Schedule of Values, Monthly Progress Schedules, Shop Drawings, Product Data and samples, Proposed product lists, executed Change Orders, and/or verified reports.

19.4.1.9 Failure of the Contractor to maintain As-Built Drawings.

19.4.1.10 Erroneous estimates by the Contractor of the value of the Work performed, or other false statements in an Application for Payment.

19.4.1.11 Unauthorized deviations from the Contract Documents.

19.4.1.12 Failure of the Contractor to prosecute the Work in a timely manner in compliance with the Construction Schedule, established progress schedules, and/or completion dates.

19.4.1.13 Failure to provide acceptable electronic certified payroll records, as required by the Labor Code, by these Contract Documents, or by written request; for each journeyman, apprentice, worker, or other employee employed by the Contractor and/or by each Subcontractor in connection with the Work for the period of the Application for Payment or if payroll records are delinquent or inadequate.

19.4.1.14 Failure to properly pay prevailing wages as required in Labor Code section 1720 *et seq.*, failure to comply with any other Labor Code requirements, and/or failure to comply with labor compliance monitoring and enforcement by the DIR.

19.4.1.15 Failure to comply with any applicable federal statutes and regulations regarding minimum wages, withholding, payrolls and basic records, apprentice and trainee employment requirements, equal employment opportunity requirements, Copeland Act requirements, Davis-Bacon Act and related requirements, Contract Work Hours and Safety Standards Act requirements, if applicable.

19.4.1.16 Failure to properly maintain or clean up the Site.

19.4.1.17 Failure to timely indemnify, defend, or hold harmless the District.

19.4.1.18 Any payments due to the District, including but not limited to payments for failed tests, utilities changes, or permits.

19.4.1.19 Failure to pay Subcontractor(s) or supplier(s) as required by law and by the Contract Documents.

19.4.1.20 Failure to pay any royalty, license or similar fees.

19.4.1.21 Contractor is otherwise in breach, default, or in substantial violation of any provision of this Contract.

19.4.1.22 Failure to perform any implementation and/or monitoring required by any SWPPP for the Project and/or the imposition of any penalties or fines therefore whether imposed on the District or Contractor.

19.4.2 Reallocation of Withheld Amounts

19.4.2.1 District may, in its discretion, apply any withheld amount to pay outstanding claims or obligations as defined herein. In so doing, District shall make such payments on behalf of Contractor. If any payment is so made by District, then that amount shall be considered a payment made under Contract by District to Contractor and District shall not be liable to Contractor for any payment made in good faith. These payments may be made without prior

judicial determination of claim or obligation. District will render Contractor an accounting of funds disbursed on behalf of Contractor.

19.4.2.2 If Contractor defaults or neglects to carry out the Work in accordance with the Contract Documents or fails to perform any provision thereof, District may, after **FORTY-EIGHT (48)** hours' written notice to the Contractor and, without prejudice to any other remedy, make good such deficiencies. The District shall adjust the total Contract Price by reducing the amount thereof by the cost of making good such deficiencies. If District deems it inexpedient to correct Work that is damaged, defective, or not done in accordance with Contract provisions, an equitable reduction in the Contract Price (of at least one hundred fifty percent (150%) of the estimated reasonable value of the nonconforming Work) shall be made therefor.

19.4.3 Payment After Cure

When Contractor removes the grounds for declining approval, payment shall be made for amounts withheld because of them. No interest shall be paid on any retainage or amounts withheld due to the failure of the Contractor to perform in accordance with the terms and conditions of the Contract Documents.

19.5 Subcontractor Payments

19.5.1 Payments to Subcontractors

No later than seven (7) days after receipt, or pursuant to Business and Professions Code section 7108.5 and Public Contract Code section 7107, the Contractor shall pay to each Subcontractor, out of the amount paid to the Contractor on account of such Subcontractor's portion of the Work, the amount to which said Subcontractor is entitled. The Contractor shall, by appropriate agreement with each Subcontractor, require each Subcontractor to make payments to its Sub-subcontractors in a similar manner.

19.5.2 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.

19.5.3 Joint Checks

District shall have the right in its sole discretion, if necessary for the protection of the District, to issue joint checks made payable to the Contractor and Subcontractors and/or 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, or a material or equipment supplier, any obligation from the District to such Subcontractor or a material or equipment supplier, or rights in such Subcontractor or a material or equipment supplier against the District.

20. COMPLETION OF THE WORK

20.1 Completion

20.1.1 District will accept completion of Contract and have the Notice of Completion recorded when the entire Work shall have been completed to the satisfaction of District.

20.1.2 The Work may only be accepted as complete by action of the governing board of the District.

20.1.3 District, at its sole option, may accept completion of Contract and have the Notice of Completion recorded when the entire Work shall have been completed to the satisfaction of District, except for minor corrective items, as distinguished from incomplete items. If Contractor fails to complete all minor corrective items within fifteen (15) days after the date of the District's acceptance of completion, District shall withhold from the final payment one hundred fifty percent (150%) of an estimate of the amount sufficient to complete the corrective items, as determined by District, until the item(s) are completed.

20.1.4 At the end of the 15-day period, if there are any items remaining to be corrected, District may elect to proceed as provided herein related to adjustments to Contract Price, and/or District's right to perform the Work of the Contractor.

20.2 Close-Out/Certification Procedures

20.2.1 Punch List

The Contractor shall notify the Architect when Contractor considers the Work complete. Upon notification, Architect will prepare a list of minor items to be completed or corrected ("Punch List"). The Contractor and/or its Subcontractors shall proceed promptly to complete and correct items on the Punch List. Failure to include an item on Punch List does not alter the responsibility of the Contractor to complete all Work in accordance with the Contract Documents.

20.2.2 Close-Out/Certification Requirements

20.2.2.1 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.

20.2.2.2 Record Drawings

20.2.2.2.1 Contractor shall provide exact Record Drawings of the Work upon completion of the Project as indicated in the Specifications.

20.2.2.2.2 Contractor is liable and responsible for any and all inaccuracies in the Record Drawings, even if inaccuracies become evident at a future date.

20.2.2.2.3 Upon completion of the Work and as a condition precedent to approval of final payment, Contractor shall obtain the Inspector's approval of

the corrected prints and employ a competent draftsman to transfer the Record Drawings information to the most current version of Autocad that is, at that time, currently utilized for plan check submission by either the District, the Architect, OPSC, and/or DSA, and print a complete set of transparent sepias. When completed, Contractor shall deliver corrected sepias and diskette/CD/other data storage device acceptable to District with Autocad file to the District.

20.2.2.3 Maintenance Manuals: Contractor shall prepare all operation and maintenance manuals and date as indicated in the Specifications.

20.2.2.4 Source Programming: Contractor shall provide all source programming for all items in the Project.

20.2.2.5 Verified Reports: Contractor shall completely and accurately fill out and file forms DSA 6-C or DSA 152 (or current form), as appropriate. Refer to section 4-336 and section 4-343 of Part 1, Title 24 of the California Code of Regulations.

20.3 Final Inspection

20.3.1 Contractor shall comply with Punch List procedures as provided herein, and maintain the presence of a Project Superintendent and Project Manager until the Punch List is complete to ensure proper and timely completion of the Punch List. Under no circumstances shall Contractor demobilize its forces prior to completion of the Punch List without District's prior written approval. Upon receipt of Contractor's written notice that all of the Punch List items have been fully completed and the Work is ready for final inspection and acceptance, Architect and Project Inspector will inspect the Work and shall submit to Contractor and District a final inspection report noting the Work, if any, required in order to complete in accordance with the Contract Documents. Absent unusual circumstances, this report shall consist of the Punch List items not yet satisfactorily completed.

20.3.2 Upon Contractor's completion of all items on the Punch List and any other uncompleted portions of the Work, the Contractor shall notify the District and Architect, who shall again inspect such Work. If the Architect finds the Work complete and acceptable under the Contract Documents, the Architect will notify Contractor, who shall then jointly submit to the Architect and the District its final Application for Payment.

20.3.3 Final Inspection Requirements

20.3.3.1 Before calling for final inspection, Contractor shall determine that the following have been performed:

20.3.3.1.1 The Work has been completed.

20.3.3.1.2 All life safety items are completed and in working order.

20.3.3.1.3 Mechanical and electrical Work are complete and tested, fixtures are in place, connected, and ready for tryout.

20.3.3.1.4 Electrical circuits scheduled in panels and disconnect switches labeled.

20.3.3.1.5 Painting and special finishes complete.

20.3.3.1.6 Doors complete with hardware, cleaned of protective film, relieved of sticking or binding, and in working order.

20.3.3.1.7 Tops and bottoms of doors sealed.

20.3.3.1.8 Floors waxed and polished as specified.

20.3.3.1.9 Broken glass replaced and glass cleaned.

20.3.3.1.10 Grounds cleared of Contractor's equipment, raked clean of debris, and trash removed from Site.

20.3.3.1.11 Work cleaned, free of stains, scratches, and other foreign matter, of damaged and broken material replaced.

20.3.3.1.12 Finished and decorative work shall have marks, dirt, and superfluous labels removed.

20.3.3.1.13 Final cleanup, as provided herein.

20.4 Costs of Multiple Inspections

More than two (2) requests of the District to make a final inspection shall be considered an additional service of District, Architect, Construction Manager, and/or Project Inspector, and all subsequent costs will be invoiced to Contractor and if funds are available, withheld from remaining payments.

20.5 Partial Occupancy or Use Prior to Completion

20.5.1 District's Rights to Occupancy

The District may occupy or use any completed or partially completed portion of the Work at any stage, and such occupancy shall not constitute the District's Final Acceptance of any part of the Work. Neither the District's Final Acceptance, the making of Final Payment, any provision in Contract Documents, nor the use or occupancy of the Work, in whole or in part, by District shall constitute acceptance of Work not in accordance with the Contract Documents nor relieve the Contractor or the Contractor's Performance Bond Surety from liability with respect to any warranties or responsibility for faulty or defective Work or materials, equipment and workmanship incorporated therein. In the event that the District occupies or uses any completed or partially completed portion of the Work, the Contractor shall remain responsible 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 unless the Contractor requests in writing, and the District agrees, to otherwise divide those responsibilities. Any dispute as to responsibilities shall be resolved pursuant to the Claims and Disputes provisions herein, with the added provision that during the dispute process, the

District shall have the right to occupy or use any portion of the Work that it needs or desires to use.

20.5.2 Inspection Prior to Occupancy or Use

Immediately prior to partial occupancy or use, the District, the Contractor, and the Architect shall jointly inspect the area to be occupied or portion of the Work to be used in order to determine and record the condition of the Work.

20.5.3 No Waiver

Unless otherwise agreed upon, partial or entire occupancy or use of a portion or portions of the Work shall not constitute beneficial occupancy or acceptance of the Work not complying with the requirements of the Contract Documents.

21. FINAL PAYMENT AND RETENTION

21.1 Final Payment

Upon receipt and approval of a valid and final Application for Payment, the Architect will issue a final Certificate of Payment. The District shall thereupon jointly inspect the Work and either accept the Work as complete or notify the Architect and the Contractor in writing of reasons why the Work is not complete. Upon acceptance of the Work of the Contractor as fully complete by the Governing Board of the District (that, absent unusual circumstances, will occur when the Punch List items have been satisfactorily completed), the District shall record a Notice of Completion with the County Recorder, and the Contractor shall, upon receipt of final payment from the District, pay the amount due Subcontractors.

21.2 Prerequisites for Final Payment The following conditions must be fulfilled prior to Final Payment:

21.2.1 A full release of all Stop Payment Notices served in connection with the Work shall be submitted by Contractor.

21.2.2 A duly completed and executed conditional waiver and release upon final payment compliant with Civil Code section 8136, from the Contractor and each subcontractor of any tier and supplier to be paid from the final payment.

21.2.3 A duly completed and executed unconditional waiver and release upon progress payment compliant with Civil Code section 8134, from the Contractor and each subcontractor of any tier and supplier that was paid from the previous progress payments.

21.2.4 A duly completed and executed Document 00 65 19.26, "AGREEMENT AND RELEASE OF ANY AND ALL CLAIMS" from the Contractor.

21.2.5 The Contractor shall have made all corrections to the Work that 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.

21.2.6 Each Subcontractor shall have delivered to the Contractor all written guarantees, warranties, applications, and bonds required by the Contract Documents for its portion of the Work.

21.2.7 Contractor must have completed all requirements set forth under "Close-Out/Certification Procedures," including, without limitation, submission of an approved set of complete Record Drawings.

21.2.8 Architect shall have issued its written approval that final payment can be made.

21.2.9 The Contractor shall have delivered to the District all manuals and materials required by the Contract Documents, which must be approved by the District.

21.2.10 The Contractor shall have completed final clean-up as provided herein.

21.3 Retention

21.3.1 The retention, less any amounts disputed by the District or that the District has the right to withhold pursuant to provisions herein, shall be paid:

21.3.1.1 After approval of the District by the Architect's Certificate of Payment,

21.3.1.2 After the satisfaction of the conditions set forth herein, and

21.3.1.3 After forty-five (45) days after the recording of the Notice of Completion by District.

21.3.2 No interest shall be paid on any retention, or on any amounts withheld due to a failure of the Contractor to perform, in accordance with the terms and conditions of the Contract Documents, except as provided to the contrary in any Escrow Agreement between the District and the Contractor pursuant to Public Contract Code section 22300.

21.4 Substitution of Securities: The District will permit the substitution of securities in accordance with the provisions of Public Contract Code section 22300.

22. UNCOVERING OF WORK

If a portion of the Work is covered without Inspector or Architect approval or not in compliance with the Contract Documents, it must, if required in writing by the District, the Project Inspector, or the Architect, be uncovered for the Project Inspector's or the Architect's observation and be corrected, replaced, and/or recovered at the Contractor's expense without change in the Contract Price or Contract Time.

23. NONCONFORMING WORK AND CORRECTION OF WORK

23.1 Nonconforming Work

23.1.1 Contractor shall promptly remove from Premises all Work identified by District as failing to conform to the Contract Documents whether incorporated or not. Contractor shall promptly replace and re-execute its own Work to comply with the

Contract Documents without additional expense to the District and shall bear the expense of making good all work of other contractors destroyed or damaged by any removal or replacement pursuant hereto and/or any delays to the District or other Contractors caused thereby.

23.1.2 If Contractor does not remove Work that District has identified as failing to conform to the Contract Documents within a reasonable time, not to exceed **FORTY-EIGHT (48)** hours, District may remove it and may store any material at Contractor's expense. If Contractor does not pay expense(s) of that removal within ten (10) days' time thereafter, District may, upon ten (10) days' written notice, sell any material at auction or at private sale and shall deduct all costs and expenses incurred by the District and/or District may withhold those amounts from payment(s) to Contractor.

23.2 Correction of Work

23.2.1 Correction of Rejected Work

Pursuant to the notice provisions herein, the Contractor shall immediately correct the Work rejected by the District, the Architect, or the Project Inspector as failing to conform to the requirements of the Contract Documents, whether observed before or after Completion and whether or not fabricated, installed, or completed. The Contractor shall bear costs of correcting the rejected Work, including additional testing, inspections, and compensation for the Inspector's or the Architect's services and expenses made necessary thereby.

23.2.2 Two-Year Warranty Corrections

If, within two (2) year after the date of Completion of the Work or a designated portion thereof, or after the date for commencement of warranties established hereunder, 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 Contractor shall correct it promptly after receipt of written notice from the District to do so. This period of two (2) years shall be extended with respect to portions of the Work first performed after Completion by the period of time between Completion and the actual performance of the Work. This obligation hereunder 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.

23.3 District's Right to Perform Work

23.3.1 If the Contractor should neglect to prosecute the Work properly or fail to perform any provisions of this contract, the District, after **FORTY-EIGHT (48)** hours written notice to the Contractor, may, without prejudice to any other remedy it may have, make good such deficiencies and may deduct the cost thereof from the payment then or thereafter due the Contractor.

23.3.2 If it is found at any time, before or after completion of the Work, that Contractor has varied from the Drawings and/or Specifications, including, but not limited to, variation in material, quality, form, or finish, or in the amount or value of the materials and labor used, District may require at its option:

23.3.2.1 That all such improper Work be removed, remade or replaced, and all work disturbed by these changes be made good by Contractor at no additional cost to the District;

23.3.2.2 That the District deduct from any amount due Contractor the sum of money equivalent to the difference in value between the work performed and that called for by the Drawings and Specifications; or

23.3.2.3 That the District exercise any other remedy it may have at law or under the Contract Documents, including but not limited to the District hiring its own forces or another contractor to replace the Contractor's nonconforming Work, in which case the District shall either issue a deductive Change Order, a Construction Change Directive, or invoice the Contractor for the cost of that work. Contractor shall pay any invoices within thirty (30) days of receipt of same or District may withhold those amounts from payment(s) to Contractor.

24. TERMINATION AND SUSPENSION

24.1 District's Right to Terminate Contractor for Cause

24.1.1 Grounds for Termination: The District, in its sole discretion, may terminate the Contract and/or terminate the Contractor's right to perform the work of the Contract based upon any of the following:

24.1.1.1 Contractor refuses or fails to execute the Work or any separable part thereof with sufficient diligence as will ensure its completion within the time specified or any extension thereof, or

24.1.1.2 Contractor fails to complete said Work within the time specified or any extension thereof, or

24.1.1.3 Contractor persistently fails or refused to perform Work or provide material of sufficient quality as to be in compliance with Contract Documents; or

24.1.1.4 Contractor files a petition for relief as a debtor, or a petition is filed against the Contractor without its consent, and the petition not dismissed within sixty (60) days; or

24.1.1.5 Contractor makes a general assignment for the benefit of its creditors, or a receiver is appointed on account of its insolvency; or

24.1.1.6 Contractor persistently or repeatedly refuses fails, except in cases for which extension of time is provided, to supply enough properly skilled workers or proper materials to complete the Work in the time specified; or

24.1.1.7 Contractor fails to make prompt payment to Subcontractors, or for material, or for labor; or

24.1.1.8 Contractor persistently disregards laws, or ordinances, or instructions of District; or

24.1.1.9 Contractor fails to supply labor, including that of Subcontractors, that is sufficient to prosecute the Work or that can work in harmony with all other elements of labor employed or to be employed on the Work; or

24.1.1.10 Contractor or its Subcontractor(s) is/are otherwise in breach, default, or in substantial violation of any provision of this Contract, including but not limited to a lapse in licensing or registration.

24.1.2 Notification of Termination

24.1.2.1 Upon the occurrence at District's sole determination of any of the above conditions, District may, without prejudice to any other right or remedy, serve written notice upon Contractor and its Surety of District's termination of this Contract and/or the Contractor's right to perform the work of the Contract. This notice will contain the reasons for termination. Unless, within three (3) days after the service of the notice, any and all condition(s) shall cease, and any and all violation(s) shall cease, or arrangement satisfactory to District for the correction of the condition(s) and/or violation(s) be made, this Contract shall cease and terminate. Upon Determination, Contractor shall not be entitled to receive any further payment until the entire Work is finished.

24.1.2.2 Upon Termination, District may immediately serve written notice of tender upon Surety whereby Surety shall have the right to take over and perform this Contract only if Surety:

24.1.2.2.1 Within three (3) days after service upon it of the notice of tender, gives District written notice of Surety's intention to take over and perform this Contract; and

24.1.2.2.2 Commences performance of this Contract within (three (3) days from date of serving of its notice to District.

24.1.2.3 Surety shall not utilize Contractor in completing the Project if the District notifies Surety of the District's objection to Contractor's further participation in the completion of the Project. Surety expressly agrees that any contractor which Surety proposes to fulfill Surety's obligations is subject to District's approval. District's approval shall not be unreasonably withheld, conditioned or delayed.

24.1.2.4 If Surety fails to notify District or begin performance as indicated herein, District may take over the Work and execute the Work to completion by any method it may deem advisable at the expense of Contractor and/or its Surety. Contractor and/or its Surety shall be liable to District for any excess cost or other damages the District incurs thereby. Time is of the essence in this Contract. If the District takes over the Work as herein provided, District may, without liability for so doing, take possession of and utilize in completing the Work such materials, appliances, plan, and other property belonging to Contractor as may be on the Site of the Work, in bonded storage, or previously paid for.

24.1.3 Effect of Termination

24.1.3.1 Contractor shall, only if ordered to do so by the District, immediately remove from the Site all or any materials and personal property belonging to Contractor that have not been incorporated in the construction of the Work, or which are not in place in the Work. The District retains the right, but not the obligation, to keep and use any materials and personal property belonging to Contractor that have not been incorporated in the construction of the Work, or which are not in place in the Work. The Contractor and its Surety shall be liable upon the performance bond for all damages caused the District by reason of the Contractor's failure to complete the Contract.

24.1.3.2 In the event that the District shall perform any portion of, or the whole of the Work, pursuant to the provisions of the General Conditions, the District shall not be liable nor account to the Contractor in any way for the time within which, or the manner in which, the Work is performed by the District or for any changes the District may make in the Work or for the money expended by the District in satisfying claims and/or suits and/or other obligations in connection with the Work.

24.1.3.3 In the event that the Contract is terminated for any reason, no allowances or compensation will be granted for the loss of any anticipated profit by the Contractor or any impact or impairment of Contractor's bonding capacity.

24.1.3.4 If the expense to the District to finish the Work exceeds the unpaid Contract Price, Contractor and Surety shall pay difference to District within twenty-one (21) days of District's request.

24.1.3.5 The District shall have the right (but shall have no obligation) to assume and/or assign to a general contractor or construction manager or other third party who is qualified and has sufficient resources to complete the Work, the rights of the Contractor under its subcontracts with any or all Subcontractors. In the event of an assumption or assignment by the District, no Subcontractor shall have any claim against the District or third party for Work performed by Subcontractor or other matters arising prior to termination of the Contract. The District or any third party, as the case may be, shall be liable only for obligations to the Subcontractor arising after assumption or assignment. Should the District so elect, the Contractor shall execute and deliver all documents and take all steps, including the legal assignment of its contractual rights, as the District may require, for the purpose of fully vesting in the District the rights and benefits of it Subcontractor under Subcontracts or other obligations or commitments. All payments due the Contractor hereunder shall be subject to a right of offset by the District for expenses and damages suffered by the District as a result of any default, acts, or omissions of the Contractor. Contractor must include this assignment provision in all of its contracts with its Subcontractors.

24.1.3.6 The foregoing provisions are in addition to and not in limitation of any other rights or remedies available to District.

24.1.4 Emergency Termination of Public Contracts Act of 1949

24.1.4.1 This Contract is subject to termination as provided by sections 4410 and 4411 of the Government Code of the State of California, being a portion of the Emergency Termination of Public Contracts Act of 1949.

24.1.4.1.1 Section 4410 of the Government Code states:

In the event a national emergency occurs, and public work, being performed by contract, is stopped, directly or indirectly, because of the freezing or diversion of materials, equipment or labor, as the result of an order or a proclamation of the President of the United States, or of an order of any federal authority, and the circumstances or conditions are such that it is impracticable within a reasonable time to proceed with a substantial portion of the work, then the public agency and the contractor may, by written agreement, terminate said contract.

24.1.4.1.2 Section 4411 of the Government Code states:

Such an agreement shall include the terms and conditions of the termination of the contract and provision for the payment of compensation or money, if any, which either party shall pay to the other or any other person, under the facts and circumstances in the case.

24.1.4.2 Compensation to the Contractor shall be determined at the sole discretion of District on the basis of the reasonable value of the Work done, including preparatory work. As an exception to the foregoing and at the District's discretion, in the case of any fully completed separate item or portion of the Work for which there is a separate previously submitted unit price or item on the accepted schedule of values, that price shall control. The District, at its sole discretion, may adopt the Contract Price as the reasonable value of the work done or any portion thereof.

24.2 Termination of Contractor for Convenience

24.2.1 District in its sole discretion may terminate the Contract upon three (3) days written notice to the Contractor. Under a termination for convenience, the District retains the right to all the options available to the District if there is a termination for cause. In case of a termination for convenience, the Contractor shall have no claims against the District except:

24.2.1.1 The actual cost for labor, materials, and services performed that is unpaid and adequately documented through timesheets, invoices, receipts, or otherwise, and

24.2.1.2 Five percent (5%) of the total cost of work performed as of the date of termination, or five percent (5%) of the value of the Work yet to be performed, whichever is less. This five percent (5%) amount shall be full compensation for all Contractor's and Subcontractor(s)' mobilization and/or demobilization costs and any anticipated loss profits resulting from termination of the Contractor for convenience.

24.3 Suspension of Work

24.3.1 District in its sole discretion may suspend, delay or interrupt the Work in whole or in part for such period of time as the District may determine upon three (3) days written notice to the Contractor.

24.3.1.1 An adjustment may be made for changes in the cost of performance of the Work caused by any such suspension, delay or interruption. No adjustment shall be made to the extent:

24.3.1.1.1 That performance is, was or would have been so suspended, delayed or interrupted by another cause for which Contractor is responsible; or

24.3.1.1.2 That an equitable adjustment is made or denied under another provision of the Contract; or

24.3.1.1.3 That the suspension of Work was the direct or indirect result of Contractor's failure to perform any of its obligations hereunder.

24.3.1.2 Any adjustments in cost of performance may have a fixed or percentage fee as provided in the section on Format for Proposed Change Order herein. This amount shall be full compensation for all Contractor's and its Subcontractor(s)' changes in the cost of performance of the Contract caused by any such suspension, delay or interruption.

25. CLAIMS AND DISPUTES

25.1 Performance during Dispute or Claim Process

Contractor shall continue to perform its Work under the Contract and shall not cause a delay of the Work during any dispute, claim, negotiation, mediation, or arbitration proceeding, except by written agreement by the District.

25.2 Definition of Dispute

25.2.1 The term "Dispute" means a separate demand by the Contractor for:

25.2.1.1 A time extension;

25.2.1.2 Payment of money or damages arising from Work done by or on behalf of the Contractor pursuant to the Contract and payment of which is not otherwise expressly provided for or Contractor is not otherwise entitled to; or

25.2.1.3 An amount of payment disputed by the District.

25.3 Dispute Presentation

25.3.1 If Contractor intends to apply for an increase in the Contract Price or Contract Time for any reason including, without limitation, the acts of District or its agents, Contractor shall, within ten (10) days after the event giving rise to the Dispute, give notice of the Dispute in writing and submit to the District a written statement of the damage sustained or time requested. On or before twenty (20)

days after Contractor's written Notice of Dispute, Contractor shall file with the District an itemized statement of the details and amounts of its Dispute for any increase in the Contract Price of Contract Time, including a Schedule Analysis and any and all other documentation substantiating Contractor's claimed damages. Otherwise, Contractor shall have waived and relinquished its dispute against the District and Contractor's claims for compensation or an extension of time shall be forfeited and invalidated. Likewise, failure to timely submit a claim and the requisite supporting documentation shall constitute a waiver of such claim. Contractor shall not be entitled to consideration for payment or time on account. In no event shall Contractor be entitled to an extension in time or delay costs for any days past the Contract completion date set forth in the Notice of Completion.

25.3.2 The Notice of Dispute shall identify:

25.3.2.1 The issues, events, conditions, circumstances and/or causes giving rise to the dispute, and shall show, in detail, the cause and effect of same;

25.3.2.2 The pertinent dates and/or durations and actual and/or anticipated effects on the Contract Price, Contract Schedule milestones and/or Contract Time adjustments;

25.3.2.3 The line-item costs for labor, material, and/or equipment, if applicable

25.3.3 The Notice of Dispute shall include the following certification by the Contractor:

25.3.3.1 The undersigned Contractor certifies under penalty of perjury that the attached dispute is made in good faith; that the supporting data is accurate and complete to the best of my knowledge and belief; that the amount requested accurately reflects the adjustment for which Contractor believes the District is liable; and that I am duly authorized to certify the dispute on behalf of the Contractor.

25.3.3.2 Furthermore, Contractor understands that the value of the attached dispute expressly includes any and all of the Contractor's costs and expenses, direct and indirect, resulting from the Work performed on the Project, additional time required on the Project and/or resulting from delay to the Project. Contractor may not separately recover for overhead or other indirect costs. Any costs, expenses, damages, or time extensions not included are deemed waived.

25.3.4 If a Dispute, or any portion thereof, remains unresolved upon satisfaction of all applicable Dispute Resolution requirements, the Contractor shall comply with all claim resolution requirements as provided in Public Contract Code section 20104.

25.3.5 Contractor shall bind its Subcontractors to the provisions of this section and will hold the District harmless against disputes by Subcontractors.

25.4 **Dispute Resolution**

25.4.1 Contractor shall file with the District the Notice of Dispute, including the documents necessary to substantiate it, on or before the day of submitting the application for final payment.

25.4.2 District shall respond in writing within forty-five (45) days of receipt of the Dispute or may request in writing within thirty (30) days of receipt of the Dispute any additional documentation supporting the Dispute or relating to defenses or claims District may have against the Contractor.

25.4.2.1 If additional information is required, it shall be requested and provided by mutual agreement of the parties.

25.4.2.2 District's written response to the documented Dispute shall be submitted to the Contractor within fifteen (15) days after receipt of the further documentation or within a period of time no greater than that taken by the Contractor to produce the additional information, whichever is greater.

25.4.3 If Contractor disputes the District's written response, Contractor may file a claim pursuant to the Claim Resolution requirements provided herein.

25.5 Definition of Claim

25.5.1 The term "Claim" means a dispute that remains unresolved at the conclusion of the Dispute Resolution requirements as provided herein.

25.6 Claim Presentations

25.6.1 Contractor must timely submit the Notice of Claim and all documents necessary to substantiate any Claim. Otherwise, Contractor shall have waived and relinquished its Claim against the District and Contractor's Claims for compensation or an extension of time shall be forfeited and invalidated, and Contractor shall not be entitled to consideration for payment or time on account of the instant matter. No Claim shall be presented prior to Project completion. Any statute that might otherwise govern the presentation of an unresolved Dispute, including but not limited to Government Code section 900 *et seq.* and Public Contract Code section 20104 *et seq.* shall be tolled for all purposes during the course of construction on the Project.

25.6.1.1 All Claims shall include the following certification by the Contractor:

25.6.1.1.1 The undersigned Contractor certifies under penalty of perjury that the attached claim is made in good faith; that the supporting data is accurate and complete to the best of my knowledge and belief; that the amount requested accurately reflects the adjustment for which Contractor believes the District is liable; and that I am duly authorized to certify the claim on behalf of the Contractor.

25.6.1.1.2 Furthermore, Contractor understands that the value of the attached claim expressly includes any and all of the Contractor's costs and expenses, direct and indirect, resulting from the Work performed on the Project, additional time required on the Project and/or resulting from delay to the Project. Any costs, expenses, damages, or time extensions not included are deemed waived.

25.6.2 The attention of the Contractor is drawn to Government Code section 12650, *et seq.* regarding penalties for false claims.

25.6.3 If a Claim, or any portion thereof, remains in dispute upon satisfaction of all applicable Dispute and Claim Resolution requirements, the Contractor shall comply with all claims presentation requirements as provided in Chapter 1 (commencing with section 900) and Chapter 2 (commencing with section 910) of Part 3 of Division 3.6 of Title 1 of Government Code as a condition precedent to the Contractor's right to bring a civil action against the District. For purposes of those provisions, the running of the time within which a Dispute or Claim must be presented to the District shall be tolled from the time the Contractor submits its written Dispute or Claim until the time the Dispute or Claim is denied, including any time utilized by any applicable meet and confer process.

25.6.4 The Contractor shall bind all its Subcontractors to the provisions of this section and will hold the District harmless against claims by Subcontractors.

25.7 Claim Resolution

25.7.1 In the event of a disagreement between the parties as to performance of the Work, the interpretation of this Contract, or payment or nonpayment for Work performed or not performed, the parties shall, after the conclusion of the Dispute Resolution requirements, attempt to resolve the Claim by those procedures set forth herein.

25.7.2 Claims of \$375,000 or Less

25.7.2.1 For all Claims of three hundred seventy-five thousand dollars (\$375,000) or less which arise between Contractor and District, the procedure set forth in Public Contract Code section 20104 *et seq.* shall apply:

25.7.2.1.1 Contractor shall file with the District any written Claim, including the documents necessary to substantiate it, upon the application for final payment.

25.7.2.1.2 For claims of less than fifty thousand dollars (\$50,000), the District shall respond in writing within forty-five (45) days of receipt of the Claim or may request in writing within thirty (30) days of receipt of the Claim any additional documentation supporting the claim or relating to defenses or claims the District may have against the Contractor.

25.7.2.1.2.1 If additional information is required, it shall be requested and provided by mutual agreement of the parties.

25.7.2.1.2.2 District's written response to the documented Claim shall be submitted to the Contractor within fifteen (15) days after receipt of the further documentation or within a period of time no greater than that taken by the Contractor to produce the additional information, whichever is greater.

25.7.2.1.3 For claims of over fifty thousand dollars (\$50,000) and less than or equal to three hundred seventy-five thousand dollars (\$375,000), the District shall respond in writing to all written Claims within sixty (60) days of receipt of the claim, or may request, in writing, within thirty (30) days of receipt of the Claim any additional documentation supporting the Claim or relating to defenses or claims the District may have against the Contractor.

25.7.2.1.3.1 If additional information is required, it shall be requested and provided upon mutual agreement of the District and the Contractor.

25.7.2.1.3.2 The District's written response to the claim, as further documented, shall be submitted to the Contractor within thirty (30) days after receipt of the further documentation, or within a period of time no greater than that taken by the Contractor to produce the additional information or requested documentation, whichever is greater.

25.7.2.2 If Contractor disputes the District's written response, or the District fails to respond within the time prescribed, Contractor may so notify the District, in writing, either within fifteen (15) days of receipt of the District's response or within fifteen (15) days of the District's failure to respond within the time prescribed, respectively, and demand an informal conference to meet and confer for settlement of the issues in dispute. Upon a demand, the District shall schedule a meet and confer conference within thirty (30) days for settlement of the dispute.

25.7.2.3 Following the meet and confer conference, if the claim or any portion of it remains in dispute, the Contractor may file a claim as provided in Chapter 1 (commencing with Section 900) and Chapter 2 (commencing with Section 910) of Part 3 of Division 3.6 of Title 1 of the Government Code. For purposes of those provisions the running of the time within which a claim must be filed shall be tolled from the time the Contractor submits its written Claim until the time the Claim is denied, including any period of time utilized by the meet and confer process.

25.7.2.4 For any civil action filed to resolve claims filed pursuant to this section, within sixty (60) days, but no earlier than thirty (30) days, following the filing of responsive pleadings, the court shall submit the matter to nonbinding mediation unless waived by mutual stipulation of both parties. The mediation process shall provide for the selection within fifteen (15) days by both parties of a disinterested third person as mediator, shall be commenced within thirty (30) days of the submittal, and shall be concluded within fifteen (15) days from the commencement of the mediation unless a time requirement is extended upon a good cause showing to the court or by stipulation of both parties. If the parties fail to select a mediator within the 15-day period, any party may petition the court to appoint the mediator.

25.7.2.5 If the matter remains in dispute, the case shall be submitted to judicial arbitration pursuant to Chapter 2.5 (commencing with Section 1141.10) of the Title 3 of Part 3 of the Code of Civil Procedure, notwithstanding Section 1141.11 of that code. The Civil Discovery Act of 1986, (Article 3 (commencing with Section 2016) of Chapter 3 of Title 3 of part 4 of the Code of Civil Procedure) shall apply to any proceeding brought under this subdivision consistent with the rules pertaining to judicial arbitration.

25.7.2.6 The District shall not fail to pay money as to any portion of a Claim which is undisputed except as otherwise provided in the Contract Documents. In any suit filed pursuant to this section, the District shall pay interest at the legal rate on any arbitration award or judgment. Interest shall begin to accrue on the date the suit is filed in a court of law.

25.7.3 Claims over \$375,000

25.7.3.1 For all Claims of over three hundred seventy-five thousand dollars (\$375,000) which arise between a Contractor and the District, the following procedure shall apply:

25.7.3.1.1 The parties agree to first endeavor to settle the dispute in an amicable manner by mediation before having recourse to a judicial forum. The Claim shall be identified in writing to the District within thirty (30) days from the date of Contractor's application for final payment of all Contract balances not in dispute and shall be mediated within one hundred and twenty (120) days from the submission of the Claim to the District. For purposes of filing a Claim to mediation, the running of the time within which mediation must be filed shall be tolled from the time the Contractor submits its written Claim until the time the Claim is denied. Mediator fees and administrative costs of the mediation shall be shared equally by the parties.

25.7.3.1.2 District may assert any counter-claims it has for damages against Contractor, including, but not limited to, defective Work and liquidated damages.

25.7.4 Contractor shall bind its Subcontractors to the provisions of this Section and will hold the District harmless against disputes by Subcontractors.

25.8 Dispute and Claim Resolution Non-Applicability

25.8.1 The procedures for dispute and claim resolutions set forth in this Article shall not apply to the following:

25.8.1.1 Personal injury, wrongful death or property damage claims;

25.8.1.2 Latent defect or breach of warranty or guarantee to repair;

25.8.1.3 Stop payment notices;

25.8.1.4 District's rights set forth in the Article on Suspension and Termination;

25.8.1.5 Disputes arising out of State labor compliance, if applicable; or

25.8.1.6 District rights and obligations as a public entity set forth in applicable statutes; provided, however, that penalties imposed against a public entity by statutes, including, but not limited to, Public Contract Code sections 20104.50 and 7107, shall be subject to the Dispute and Claim Resolution requirements provided in this Article.

25.9 Contractor's costs incurred in seeking relief under this Article are not recoverable from the District.

26. STATE LABOR, WAGE & HOUR, APPRENTICE, AND RELATED PROVISIONS

26.1 Labor Compliance and Enforcement

Since this Project is subject to labor compliance and enforcement by the Department of Industrial Relations ("DIR"), Contractor specifically acknowledges and understands that it shall perform the Work of this Agreement while complying with all the applicable provisions of Division 2, Part 7, Chapter 1, of the Labor Code and Title 8 of the California Code of Regulations, including, without limitation, the requirement that the Contractor and all Subcontractors shall timely furnish complete and accurate electronic certified payroll records directly to the DIR. The District may not issue payment if this requirement is not met.

26.2 Wage Rates, Travel, and Subsistence

26.2.1 Pursuant to the provisions of article 2 (commencing at section 1770), chapter 1, part 7, division 2, of the Labor Code of California, 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 work is to be performed for each craft, classification, or type of worker needed to execute this Contract are on file at the District's principal office and copies will be made available to any interested party on request. Contractor shall obtain and post a copy of these wage rates at the job site.

26.2.2 Holiday and overtime work, when permitted by law, shall be paid for at the general prevailing rate of per diem wages for holiday and overtime work on file with the Director of the Department of Industrial Relations, unless otherwise specified. The holidays upon which those rates shall be paid need not be specified by the District, but shall be all holidays recognized in the applicable collective bargaining agreement. If the prevailing rate is not based on a collectively bargained rate, the holidays upon which the prevailing rate shall be paid shall be as provided in Section 6700 of the Government Code.

26.2.3 Contractor shall pay and shall cause to be paid each worker engaged in Work on the Project the general prevailing rate of per diem wages determined by the Director of the Department of Industrial Relations, regardless of any contractual relationship which may be alleged to exist between Contractor or any Subcontractor and such workers.

26.2.4 If during the period this bid is required to remain open, the Director of the Department of Industrial Relations determines that there has been a change in any prevailing rate of per diem wages in the locality in which the Work under the Contract is to be performed, such change shall not alter the wage rates in the Notice to Bidders or the Contract subsequently awarded.

26.2.5 Pursuant to Labor Code section 1775, Contractor shall, as a penalty to District, forfeit the statutory amount (believed by the District to be currently up to two hundred dollars (\$200) for each calendar day, or portion thereof, for each worker paid less than the prevailing rates, determined by the District and/or the Director, for the work or craft in which that worker is employed for any public work done under Contract by Contractor or by any Subcontractor under it. The difference between such prevailing wage rates and the amount paid to each worker for each calendar day or portion thereof for which each worker was paid less than the prevailing wage rate shall be paid to each worker by Contractor.

26.2.6 Any worker employed to perform Work on the Project, which Work is not covered by any classification listed in the general prevailing wage rate of per diem wages determined by the Director, shall be paid not less than the minimum rate of wages specified therein for the classification which most nearly corresponds to Work to be performed by him, and such minimum wage rate shall be retroactive to time of initial employment of such person in such classification.

26.2.7 Pursuant to Labor Code section 1773.1, per diem wages are deemed to include employer payments for health and welfare, pension, vacation, travel time, subsistence pay, and apprenticeship or other training programs authorized by Labor Code section 3093, and similar purposes.

26.2.8 Contractor shall post at appropriate conspicuous points on the Site of Project, a schedule showing all determined minimum wage rates and all authorized deductions, if any, from unpaid wages actually earned. In addition, Contractor shall post a sign-in log for all workers and visitors to the Site, a list of all subcontractors of any tier on the Site, and the required Equal Employment Opportunity poster(s).

26.3 Hours of Work

26.3.1 As provided in article 3 (commencing at section 1810), chapter 1, part 7, division 2, of the Labor Code, eight (8) hours of labor shall constitute a legal days work. The time of service of any worker employed at any time by Contractor or by any Subcontractor on any subcontract under this Contract upon the Work or upon any part of the Work contemplated by this Contract shall be limited and restricted by Contractor to eight (8) hours per day, and forty (40) hours during any one week, except as hereinafter provided. Notwithstanding the provisions hereinabove set forth, Work performed by employees of Contractor in excess of eight (8) hours per day and forty (40) hours during any one week, shall be permitted upon this public work upon compensation for all hours worked in excess of eight (8) hours per day at not less than one and one-half times the basic rate of pay.

26.3.2 Contractor shall keep and shall cause each Subcontractor to keep an accurate record showing the name of and actual hours worked each calendar day and each calendar week by each worker employed by Contractor in connection with the Work or any part of the Work contemplated by this Contract. The record shall be kept open at all reasonable hours to the inspection of District and to the Division of Labor Standards Enforcement of the DIR.

26.3.3 Pursuant to Labor Code section 1813, Contractor shall as a penalty to the District forfeit the statutory amount (believed by the District to be currently twenty-five dollars (\$25)) for each worker employed in the execution of this Contract by Contractor or by any Subcontractor for each calendar day during which such worker is required or permitted to work more than eight (8) hours in any one calendar day and forty (40) hours in any one calendar week in violation of the provisions of article 3 (commencing at section 1810), chapter 1, part 7, division 2, of the Labor Code.

26.3.4 Any Work necessary to be performed after regular working hours, or on Sundays or other holidays shall be performed without additional expense to the District.

26.4 Payroll Records

26.4.1 Contractor shall upload, and shall cause each Subcontractor performing any portion of the Work under this Contract to upload, an accurate and complete certified payroll record ("CPR") electronically using DIR's eCPR System by uploading the CPRs by electronic XML file or entering each record manually using the DIR's iform (or current form) online on a weekly basis and within ten (10) days of any request by the District or Labor Commissioner at <http://www.dir.ca.gov/Public-Works/Certified/Payroll-Reporting.html> or current application and URL, showing the name, address, social security number, work classification, straight time, and overtime hours worked each day and week, and the actual per diem wages paid to each journeyman, apprentice, worker, or other employee employed by the Contractor and/or each Subcontractor in connection with the Work.

26.4.1.1 The CPRs enumerated hereunder shall be filed directly with the DIR on a weekly basis or to the requesting party, whether the District or DIR, within ten (10) days after receipt of each written request. The CPRs from the Contractor and each Subcontractor for each week shall be provided on or before Wednesday of the week following the week covered by the CPRs. District may not make any payment to Contractor until:

26.4.1.1.1 Contractor and/or its Subcontractor(s) provide CPRs acceptable to the DIR; and

26.4.1.1.2 Any delay in Contractor and/or its Subcontractor(s) providing CPRs to the DIR in a timely manner may directly delay Contractor's payment.

26.4.2 All CPRs shall be available for inspection at all reasonable hours at the principal office of Contractor on the following basis:

26.4.2.1 A certified copy of an employee's CPR shall be made available for inspection or furnished to the employee or his/her authorized representative on request.

26.4.2.2 CPRs shall be made available for inspection or furnished upon request to a representative of District, Division of Labor Standards Enforcement, Division of Apprenticeship Standards, and/or the DIR.

26.4.2.3 CPRs shall be made available upon request by the public for inspection or copies thereof made; provided, however, that a request by the public shall be made through the District, Division of Apprenticeship Standards, or the Division of Labor Standards Enforcement. If the requested CPRs have not been provided pursuant to the provisions herein, the requesting party shall, prior to being provided the records reimburse the costs of preparation by Contractor, Subcontractors, and the entity through which the request was made. The public shall not be given access to the records at the principal office of Contractor.

26.4.3 Any copy of records made available for inspection as copies and furnished upon request to the public or any public agency by District, Division of Apprenticeship Standards, or Division of Labor Standards Enforcement shall be marked or obliterated in such a manner as to prevent disclosure of an individual's name, address, and social security number. The name and address of Contractor awarded Contract or performing Contract shall not be marked or obliterated.

26.4.4 Contractor shall inform District of the location of the records enumerated hereunder, including the street address, city, and county, and shall, within five (5) working days, provide a notice of change of location and address.

26.4.5 In the event of noncompliance with the requirements of this section, Contractor shall have ten (10) days in which to comply subsequent to receipt of written notice specifying in what respects Contractor must comply with this section. Should noncompliance still be evident after the ten (10) day period, Contractor shall, as a penalty to District, forfeit up to one hundred dollars (\$100) for each calendar day, or portion thereof, for each worker, until strict compliance is effectuated. Upon the request of the Labor Commissioner, these penalties shall be withheld from progress payments then due.

26.5 **[RESERVED]**

26.6 **Apprentices**

26.6.1 Contractor acknowledges and agrees that, if this Contract involves a dollar amount greater than or a number of working days greater than that specified in Labor Code section 1777.5, then this Contract is governed by the provisions of Labor Code Section 1777.5. It shall be the responsibility of Contractor to ensure compliance with this Article and with Labor Code section 1777.5 for all apprenticeship occupations.

26.6.2 Apprentices of any crafts or trades may be employed and, when required by Labor Code section 1777.5, shall be employed provided they are properly registered in full compliance with the provisions of the Labor Code.

26.6.3 Every such apprentice shall be paid the standard wage paid to apprentices under the regulations of the craft or trade at which he/she is employed, and shall be employed only at the work of the craft or trade to which she/he is registered.

26.6.4 Only apprentices, as defined in section 3077 of the Labor Code, who are in training under apprenticeship standards and written apprentice agreements under chapter 4 (commencing at section 3070), division 3, of the Labor Code, are eligible to be employed. The employment and training of each apprentice shall be in accordance with the provisions of the apprenticeship standards and apprentice agreements under which he/she is training.

26.6.5 Pursuant to Labor Code section 1777.5, if that section applies to this Contract as indicated above, Contractor and any Subcontractors employing workers in any apprenticeable craft or trade in performing any Work under this Contract shall apply to the applicable joint apprenticeship committee for a certificate approving the Contractor or Subcontractor under the applicable apprenticeship standards and fixing the ratio of apprentices to journeymen employed in performing the Work.

26.6.6 Pursuant to Labor Code section 1777.5, if that section applies to this Contract as indicated above, Contractor and any Subcontractor may be required to make contributions to the apprenticeship program.

26.6.7 If Contractor or Subcontractor willfully fails to comply with Labor Code section 1777.5, then, upon a determination of noncompliance by the Administrator of Apprenticeship, it shall:

26.6.7.1 Be denied the right to bid on any subsequent project for one (1) year from the date of such determination;

26.6.7.2 Forfeit as a penalty to District the full amount as stated in Labor Code section 1777.7. Interpretation and enforcement of these provisions shall be in accordance with the rules and procedures of the California Apprenticeship Council and under the authority of the Chief of the Division of Apprenticeship Standards.

26.6.8 Contractor and all Subcontractors shall comply with Labor Code section 1777.6, which section forbids certain discriminatory practices in the employment of apprentices.

26.6.9 Contractor shall become fully acquainted with the law regarding apprentices prior to commencement of the Work. Special attention is directed to sections 1777.5, 1777.6, and 1777.7 of the Labor Code, and title 8, California Code of Regulations, section 200 *et seq.* Questions may be directed to the State Division of Apprenticeship Standards, 455 Golden Gate Avenue, San Francisco, California 94102.

26.7 Non-Discrimination

26.7.1 Contractor herein agrees not to discriminate in its recruiting, hiring, promotion, demotion, or termination practices on the basis of race, religious creed, national origin, ancestry, sex, age, or physical handicap in the performance of this Contract and to comply with the provisions of the California Fair Employment and Housing Act as set forth in part 2.8 of division 3 of the California Government Code, commencing at section 12900; the Federal Civil Rights Act of 1964, as set forth in Public Law 88-352, and all amendments thereto; Executive Order 11246, and all administrative rules and regulations found to be applicable to Contractor and Subcontractor.

26.7.2 Special requirements for Federally Assisted Construction Contracts: During the performance of this Contract, Contractor agrees to incorporate in all subcontracts the provisions set forth in Chapter 60-1.4(b) of Title 41 published in Volume 33 No. 104 of the Federal Register dated May 28, 1968.

26.8 Labor First Aid

Contractor shall maintain emergency first aid treatment for Contractor's workers on the Project which complies with the Federal Occupational Safety and Health Act of 1970 (29 U.S.C. § 651 *et seq.*) and the California Occupational Safety and Health Act of 1973 (8 Cal. Code of Regs., §1 *et seq.*).

27. [RESERVED]

28. MISCELLANEOUS

28.1 Assignment of Antitrust Actions

28.1.1 Section 7103.5(b) of the Public Contract Code states:

In entering into a public works contract or subcontract to supply goods, services, or materials pursuant to a public works contract, the Contractor or subcontractor offers

and agrees to assign to the awarding body 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. Sec. 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, made and become effective at the time the awarding body tenders final payment to the Contractor, without further acknowledgment by the parties.

28.1.2 Section 4552 of the Government Code states:

In submitting a bid to a public purchasing body, the bidder offers and agrees that if the bid is accepted, it will assign to the purchasing body 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. Sec. 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.

28.1.3 Section 4553 of the Government Code states:

If an awarding body or public purchasing body receives, either through judgment or settlement, a monetary recovery for a cause of action assigned under this chapter, the assignor shall be entitled to receive reimbursement for actual legal costs incurred and may, upon demand, recover from the public body any portion of the recovery, including treble damages, attributable to overcharges that were paid by the assignor but were not paid by the public body as part of the bid price, less the expenses incurred in obtaining that portion of the recovery.

28.1.4 Section 4554 of the Government Code states:

Upon demand in writing by the assignor, the assignee shall, within one year from such demand, reassign the cause of action assigned under this part if the assignor has been or may have been injured by the violation of law for which the cause of action arose and (a) the assignee has not been injured thereby, or (b) the assignee declines to file a court action for the cause of action.

28.1.5 Under this Article, "public purchasing body" is District and "bidder" is Contractor.

28.2 **Excise Taxes**

If, under Federal Excise Tax Law, any transaction hereunder constitutes a sale on which a Federal Excise Tax is imposed and the sale is exempt from such Federal Excise Tax because it is a sale to a State or Local Government for its exclusive use, District, upon request, will execute documents necessary to show (1) that District is a political subdivision of the State for the purposes of such exemption, and (2) that the sale is for the exclusive use of District. No Federal Excise Tax for such materials shall be included in any Contract Price.

28.3 Taxes

Contract Price is to include any and all applicable sales taxes or other taxes that may be due in accordance with section 7051 of the Revenue and Taxation Code; Regulation 1521 of the State Board of Equalization or any other tax code that may be applicable.

28.4 Shipments

All shipments must be F.O.B. destination to Site or sites, as indicated in the Contract Documents. There must be no charge for containers, packing, unpacking, drayage, or insurance. The total Contract Price shall be all inclusive (including sales tax) and no additional costs of any type will be considered.

28.5 Compliance with Government Reporting Requirements

If this Contract is subject to federal or other governmental reporting requirements because of federal or other governmental financing in whole or in part for the Project of which it is part, or for any other reason, Contactor shall comply with those reporting requirements at the request of the District at no additional cost.

END OF DOCUMENT

SPECIAL CONDITIONS

1. Re-Roof Project

1.1 Access. Access to the school buildings and entry to buildings, classrooms, restrooms, mechanical rooms, electrical rooms, or other rooms, for construction purposes, must be coordinated with District and onsite District personnel before Work is to start. Unless agreed to otherwise in writing, only a school custodian will be allowed to unlock and lock doors in existing building(s). The custodian will be available only while school is in session. If a custodian is required to arrive before 7:00 a.m. or leave after 3:30 p.m. to accommodate Contractor's Work, the overtime wages for the custodian will be paid by the Contractor, unless at the discretion of the District, other arrangements are made in advance.

1.2 Keys. Upon request, the District may, at its own discretion, provide keys to the school site for the convenience of the Contractor. The Contractor agrees to pay all expenses to re-key the entire school site and all other affected District buildings if the keys are lost or stolen, or if any unauthorized party obtains a copy of the key or access to the school.

1.3 Maintaining Services. The Contractor is advised that Work is to be performed in spaces regularly scheduled for instruction. Interruption and/or periods of shutdown of public access, electrical service, water service, lighting, or other utilities shall be only as arranged in advance with the District. Contractor shall provide temporary services to all facilities interrupted by Contractor's Work.

1.4 Maintaining Utilities. The Contractor shall maintain in operation during duration of Contract, drainage lines, storm drains, sewers, water, gas, electrical, steam, and other utility service lines within working area.

1.5 Confidentiality. Contractor shall maintain the confidentiality of all information, documents, programs, procedures and all other items that Contractor encounters while performing the Work. This requirement shall be ongoing and shall survive the expiration or termination of this Contract and specifically includes, without limitation, all student, parent, and employee disciplinary information and health information.

1.6 Work during Instructional Time. By submitting its bid, Contractor affirms that Work may be performed during ongoing instruction in existing facilities. If so, Contractor agrees to cooperate to the best of its ability to minimize any disruption to school operations and any use of school facilities by the public up to, and including, rescheduling specific work activities, at no additional cost to District.

1.7 No Work during Student Testing. Contractor shall, at no additional cost to the District and at the District's request, coordinate its Work to not disturb District

students including, without limitation, not performing any Work when students at the Site are taking State or Federally-required tests.

2. Badge Policy for Contractors

All Contractors doing work for the District will provide their workers with identification badges. These badges will be worn by all members of the Contractor's staff who are working in a District facility.

2.1 Badges must be filled out in full and contain the following information:

2.1.1 Name of Contractor

2.1.2 Name of Employee

2.1.3 Contractor's address and phone number

2.2 Badges are to be worn when the Contractor or his/her employees are on site and must be visible at all times. Contractors must inform their employees that they are required to allow District employees, the Architect, the Construction Manager, the Program Manager, or the Project Inspector to review the information on the badges upon request.

2.3 Continued failure to display identification badges as required by this policy may result in the individual being removed from the Project or assessment of fines against the Contractor.

3. Substitution for Specified Items

3.1 Whenever in the Specifications any materials, process, or article is indicated or specified by grade, patent, or proprietary name, or by name of manufacturer, that Specification shall be deemed to be followed by the words "or equal." Contractor may, unless otherwise stated, offer any material, process, or article that shall be substantially equal or better in every respect to that so indicated or specified.

3.1.1 If the material, process, or article offered by Contractor is not, in the opinion of the District, substantially equal or better in every respect to that specified, then Contractor shall furnish the material, process, or article specified in the Specifications without any additional compensation or change order.

3.1.2 This provision shall not be applicable with respect to any material, product, thing or service for which District made findings and gave notice in accordance with Public Contract Code section 3400(c); therefore, Contractor shall not be entitled to request a substitution with respect to those materials, products or services.

3.2 A request for a substitution shall be submitted as follows:

3.2.1 Contractor shall notify the District in writing of any request for a substitution at least ten (10) days prior to bid opening as indicated in the Instructions to Bidders.

3.2.2 Within 35 days after the date of the Notice of Award, Contractor shall provide data substantiating a request for substitution of "an equal" item, including but not limited to the following:

3.2.3 All variations of the proposed substitute from the material specified including, but not limited to, principles of operation, materials, or construction finish, thickness or gauge of materials, dimensions, weight, and tolerances;

3.2.4 Available maintenance, repair or replacement services;

3.2.5 Increases or decreases in operating, maintenance, repair, replacement, and spare parts costs;

3.2.6 Whether or not acceptance of the substitute will require other changes in the Work (or in work performed by the District or others under Contract with the District); and

3.2.7 The time impact on any part of the Work resulting directly or indirectly from acceptance of the proposed substitute.

3.3 No substitutions shall be made until approved, in writing, by the District. The burden of proof as to equality of any material, process, or article shall rest with Contractor. The Contractor warrants that if substitutes are approved:

3.3.1 The proposed substitute is equal or superior in all respects to that specified, and that such proposed substitute is suitable and fit for the intended purpose and will perform adequately the function and achieve the results called for by the general design and the Contract Documents;

3.3.2 The Contractor provides the same warranties and guarantees for the substitute that would be provided for that specified;

3.3.3 The Contractor shall be fully responsible for the installation of the substitute and any changes in the Work required, either directly or indirectly, because of the acceptance of such substitute, with no increase in Contract Price or Contract Time. Incidental changes or extra component parts required to accommodate the substitute will be made by the Contractor without a change in the Contract Price or Contract Time;

3.3.4 The Contractor shall be responsible for any re-design costs occasioned by District's acceptance and/or approval of any substitute; and

3.3.5 The Contractor shall, in the event that a substitute is less costly than that specified, credit the District with one hundred percent (100%) of the net difference between the substitute and the originally specified material. In this event, the Contractor agrees to execute a deductive Change Order to reflect that credit.

3.4 In the event Contractor furnishes a material, process, or article more expensive than that specified, the difference in the cost of that material, process, or article so furnished shall be borne by Contractor.

3.5 In no event shall the District be liable for any increase in Contract Price or Contract Time due to any claimed delay in the evaluation of any proposed substitute or in the acceptance or rejection of any proposed substitute.

3.6 Contractor shall be responsible for any costs the District incurs for professional services, DSA fees, or delay to the Project Schedule, if applicable, while DSA reviews changes for the convenience of Contractor and/or to accommodate Contractor's means and methods. District may deduct those costs from any amounts owing to the Contractor for the review of the request for substitution, even if the request for substitution is not approved. District, at its sole discretion, shall deduct from the payments due to and/or invoice Contractor for all the professional services and/or DSA fees or delay to the Project Schedule, if applicable, while DSA reviews changes for the convenience of Contractor and/or to accommodate Contractor's means and methods arising herein.

4. Weather Days

Delays due to Adverse Weather conditions will only be permitted in compliance with the provisions in the General Conditions and only if the number of days of Adverse Weather exceeds the following parameters and Contractor can verify that the excess days of Adverse Weather caused delays:

January	<u>2</u>	July	<u>0</u>
February	<u>1</u>	August	<u>0</u>
March	<u>1</u>	September	<u>0</u>
April	<u>1</u>	October	<u>0</u>
May	<u>1</u>	November	<u>1</u>
June	<u>0</u>	December	<u>1</u>

5. Insurance Policy Limits

All of Contractor's insurance shall be with insurance companies with an A.M. Best rating of no less than _____. The limits of insurance shall not be less than:

Commercial General Liability	Product Liability and Completed Operations, Fire Damage Liability – Split Limit	Low Risk: \$1,000,000 per occurrence; \$2,000,000 aggregate
		Intermediate Risk: \$2,000,000 per occurrence; \$4,000,000 aggregate
		High Risk: \$5,000,000 per occurrence; \$10,000,000 aggregate]
Automobile Liability – Any Auto	Combined Single Limit	[E.G.] Personal vehicles: \$500,000 Commercial vehicles: \$1,000,000
		Personal vehicles: \$100,000 per person/ \$300,000 per accident]
Workers' Compensation		Statutory limits pursuant to State law
Employers' Liability		[E.G. \$0]
Builder's Risk (Course of Construction)		Issued for the value and scope of Work indicated herein.
Pollution Liability		[E.G. \$0]

6. Permits, Certificates, Licenses, Fees, Approvals

6.1 Payment for Permits, Certificates, Licenses, Fees, and Approvals. As required in the General Conditions, the Contractor shall secure and pay for all permits, licenses, approvals, and certificates necessary for the prosecution of the Work with the exception of the following:

6.1.1 NA

With respect to the above-listed items, Contractor shall be responsible for securing such items; however, District will be responsible for payment of these charges or fees. Contractor shall notify the District of the amount due with respect to such

items and to whom the amount is payable. Contractor shall provide the District with an invoice and receipt with respect to such charges or fees.

6.2 General Permit For Storm Water Discharges Associated With Construction and Land Disturbance Activities

6.2.1 Contractor acknowledges that all California school districts are obligated to develop and implement the following requirements for the discharge of storm water to surface waters from its construction and land disturbance activities (storm water requirements), without limitation:

6.2.1.1 Municipal Separate Storm Sewer System (MS4) is a system of conveyances used to collect and/or convey storm water, including, without limitation, catch basins, curbs, gutters, ditches, man-made channels, and storm drains.

6.2.1.2 Storm Water Pollution Prevention Plan ("SWPPP") contains specific best management practices ("BMPs") and establishes numeric effluent limitations at:

6.2.1.2.1 Sites where the District engages in maintenance (e.g., fueling, cleaning, repairing) for transportation activities.

6.2.1.2.2 Construction sites where:

6.2.1.2.2.1 One (1) or more acres of soil will be disturbed, or

6.2.1.2.2.2 The project is part of a larger common plan of development that disturbs more than one (1) acre of soil.

6.2.2 Contractor shall comply with any District storm water requirements that are approved by the District and applicable to the Project, at no additional cost to the District.

6.2.3 At no additional cost to the District, Contractor shall provide a Qualified Storm Water Practitioner who shall be onsite and implement and monitor any and all SWPPP requirements applicable to the Project, including but not limited to:

6.2.3.1 At least forty eight (48) hours prior to a forecasted rain event, implementing the Rain Event Action Plan (REAP) for any rain event requiring implementation of the REAP, including any erosion and sediment control measures needed to protect all exposed portions of the site; and

6.2.3.2 Monitoring any Numeric Action Levels (NALs), if applicable.

7. As-Builts and Record Drawings

7.1 When called for by Division 1, Contractor shall submit As-Built Drawings pursuant to the Contract Documents consisting of one set of computer-aided design and

drafting ("CADD") files in the following format _____, plus one set of As-Built Drawings on vellum or mylar.

7.2 Contractor shall submit Record Drawings pursuant to the Contract Documents consisting of one set of computer-aided design and drafting ("CADD") files in the following format _____, plus one set of Record Drawings on vellum or mylar].

8. Fingerprinting

Contractor shall comply with the provisions of Education Code section 45125.2 regarding the submission of employee fingerprints to the California Department of Justice and the completion of criminal background investigations of its employees, its subcontractor(s), and its subcontractors' employees. Contractor shall not permit any employee to have any contact with District pupils until such time as Contractor has verified in writing to the governing board of the District, that such employee has not been convicted of a violent or serious felony, as defined in Education Code section 45122.1. Contractor shall fully complete and perform all tasks required pursuant to the Criminal Background Investigation/ Fingerprinting Certification.

9. Disabled Veteran Business Enterprises

This Project uses or may plan to use funds allocated pursuant to the State of California School Facility Program ("Program") for the construction and/or modernization of school buildings. Therefore, Section 17076.11 of the Education Code requires the District to have a participation goal for disabled veteran business enterprises ("DVBE") of at least three percent (3%), per year, of the overall dollar amount expended each year by the District on projects that receive state funding. The Contractor must submit the Disabled Veteran Business Enterprise Participation Certification to the District with its executed Agreement, identifying the steps Contractor took to solicit DVBE participation in conjunction with this Contract.

10. Construction Manager

The District will use a Construction Manager on the Project that is the subject of this Contract. Ryan Lancaster, Construction Specialist is the Construction Manager for this Project.

11. Program Manager

Leonard Kahn, CBO, is the Program Manager designated for the Project that is the subject of this Contract.

12. Warranty/Guarantee and Correction of Work

12.1.1 The Contractor shall obtain and preserve for the benefit of the District, manufacturer's warranties on materials, fixtures, and equipment incorporated into the Work.

12.1.2 In addition to guarantees required elsewhere, Contractor shall, and hereby does guarantee and warrant all Work furnished on the job against all defects for a period of **TWO (2)** years after the later of the following dates, unless a longer period is provided for in the Contract Documents:

12.1.2.1 The acceptance by the District's governing board of the Work, subject to these General Conditions, or

12.1.2.2 The date that commissioning for the Project, if any, was completed.

At the District's sole option, Contractor shall repair or replace any and all of that Work, together with any other Work that may be displaced in so doing, that may prove defective in workmanship and/or materials within a **TWO (2)** years period from date of completion as defined above, unless a longer period is provided for in the Contract Documents, without expense whatsoever to District. In the event of failure of Contractor and/or Surety to commence and pursue with diligence said replacements or repairs within ten (10) days after being notified in writing, Contractor and Surety hereby acknowledge and agree that District is authorized to proceed to have defects repaired and made good at expense of Contractor and/or Surety who hereby agree to pay costs and charges therefore immediately on demand.

12.1.3 If, in the opinion of District, defective work creates a dangerous condition or requires immediate correction or attention to prevent further loss to District or to prevent interruption of operations of District, District will attempt to give the notice required above. If Contractor or Surety cannot be contacted or neither complies with District's request for correction within a reasonable time as determined by District, District may, notwithstanding the above provision, proceed to make any and all corrections and/or provide attentions the District believes are necessary. The costs of correction or attention shall be charged against Contractor and Surety of the guarantees provided in this Article or elsewhere in this Contract.

12.1.3 The above provisions do not in any way limit the guarantees on any items for which a longer guarantee is specified or on any items for which a manufacturer gives a guarantee for a longer period. Contractor shall furnish to District all appropriate guarantee or warranty certificates as indicated in the Specifications or upon request by District.

12.1.4 Nothing herein shall limit any other rights or remedies available to District.

23.2.2 Two-Year Warranty Corrections

If, within two (2) years after the date of Completion of the Work or a designated portion thereof, or after the date for commencement of warranties established hereunder, 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 Contractor shall correct it promptly after receipt of written notice from the District to do so. This period of two (2) years shall be extended with respect to portions of the Work first performed after Completion by the period of time between Completion and the actual performance of the Work. This obligation hereunder shall survive District's acceptance of the Work under the Contract and termination of the Contract. The District shall give such notice promptly after discovery of the condition.

16. Preliminary Schedule of Values

The preliminary schedule of values shall include, at a minimum, the following information and the following structure:

**LODI UNIFIED SCHOOL DISTRICT
LAKEWOOD ELEMENTARY SCHOOL RE-ROOF**

**SPECIAL CONDITIONS
DOCUMENT 00 73 13 -8**

Replace provision in the General Conditions with the following provisions:

16.1.1.2.3. The preliminary schedule of values shall not provide for values any greater than the following percentages of the Contract value:

16.1.2.3.1 Mobilization and layout combined to equal not more than [1]%;

16.1.1.2.3.2 Submittals, samples and shop drawings combined to equal not more than [3]%;

16.1.1.2.3.3 Bonds and insurance combined to equal not more than [2]%.

END OF DOCUMENT

HAZARDOUS MATERIALS
PROCEDURES & REQUIREMENTS

1. Summary

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

2. Notice of Hazardous Waste or Materials

- a. Contractor shall give notice in writing to the District, the Construction Manager, and the Architect promptly, before any of the following materials are disturbed, and in no event later than twenty-four (24) hours after first observance, of any:
 - (1) Material that Contractor believes may be a 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) Materials as outlined in specification Section 02080, Limited Hazardous Materials Abatement and Disposal;
 - (3) 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 laws and contractual 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, radioactive material, or other hazardous materials;
 - (3) The generation, processing, treatment, storage, transport, disposal, destruction, or other management of asbestos, PCB, lead, petroleum, radioactive material, 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 therefrom.

- 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 DOCUMENT



PART 3: GENERAL REQUIREMENTS

SUMMARY OF WORK

PART 1 - GENERAL

1.01 RELATED DOCUMENTS AND PROVISIONS:

All Contract Documents should be reviewed for applicable provisions related to the provisions in this document, including without limitation:

- A. General Conditions, including, without limitation, Site Access Conditions and Requirements;
- B. Special Conditions;
- C. Existing Conditions specification section 00 31 19.

1.02 SUMMARY OF WORK COVERED BY CONTRACT DOCUMENTS

- A. The Work shall include all Work shown and specified except for work indicated "N.I.C." or "Not in Contract" or "Future."
- B. The contractor must maintain access to the existing buildings at all times during all phases. Contractor is to provide secure fencing and/or barricades to keep the general public from entering the work areas. Work hours shall be from 7:00 AM. to 7:00 P.M. on weekdays and 9:00 AM. to 6:00 P.M. on weekends. If the contractor chooses to work more than 8 hours per day or 5 days per week he shall be responsible for the overtime costs of the inspectors involved in that phase of the work.
 - (1) Access to inside of the buildings will only be from the hours of 6:30 a.m. to 2:30 p.m. Monday through Friday, therefore scheduling of work that requires doors to be open will have to be done during these hours.
- C. The contractor shall include in their bid all work, and costs associated in paying for and obtaining the permit from the City of Lodi for all the Work pertaining to this contract 0921-8221; 8150-5830-4.
- D. Unless provided otherwise in the Contract Documents, all risk of loss of Work covered by Contract Documents shall rest with Contractor until Final Completion and Acceptance of the Work.
- E. The Work of this Contract may consist of the following:
 - Remove all existing roofing shingles, underlayment, designated sheet metal flashings, cupola, gutters and portions of the existing downspouts as directed by School District. Existing shingles on the main building and adjacent building, see specification section 02080.
 - Remove abandoned roof mounted equipment as directed by School District.
 - Repair, fill in roof decking where abandoned equipment and cupola is

- removed.
- Remove and replace existing deteriorated wood roof decking, fascia and trim where designated by School District to match existing.
- Remove stucco as necessary to install new flashing where there is currently none and the existing shingle roof abuts the stucco directly.
- Fill in the existing integral gutters with appropriate size blocking and install new plywood over this blocking. Nail Plywood in accordance with City of Lodi code regulations, at a minimum per the CBC, California Building Code.
- Furnish and install new underlayment and fiberglass shingle roofing system.
- Furnish and install new sheet metal flashings and trim per contract documents.
- Furnish and install new gutters and downspouts. Verify new gutter and downspout locations, types and sizes with School District prior to the Bid Quotation.

1.03 CONTRACTS

- A. Perform the Work under a single, fixed-price Contract.

1.04 WORK BY OTHERS

- A. Work on the Project that will be performed and completed prior to the start of the Work of this Contract:
 - (1) None
- B. Work on the Project that will be performed by others concurrent with the Work of this Contract:
 - (1) None

1.05 CODES, REGULATIONS, AND STANDARDS

- A. The codes, regulations, and standards adopted by the City of Lodi, state and federal agencies having jurisdiction shall govern minimum requirements for this project. Where codes, regulations, and standards conflict with the Contract Documents, these conflicts shall be brought to the immediate attention of the District and the Architect.
- B. Codes, regulations, and standards shall be as published effective as of date of bid opening, unless otherwise specified or indicated.

1.06 PROJECT RECORD DOCUMENTS:

- A. Contractor shall maintain on Site one set of the following record documents; Contractor shall record actual revisions to the Work:
 - (1) Contract Drawings.
 - (2) Specifications.
 - (3) Addenda.

- (4) Change Orders and other modifications to the Contract.
 - (5) Reviewed shop drawings, product data, and samples.
 - (6) Field test records.
 - (7) Inspection certificates.
 - (8) Manufacturer's certificates.
- B. Contractor shall store Record Documents separate from documents used for construction. Provide files, racks, and secure storage for Record Documents and samples.
- C. Contractor shall record information concurrent with construction progress.
- D. Specifications: Contractor shall legibly mark and record at each product section of the Specifications the description of the actual product(s) installed, including the following:
 - (1) Manufacturer's name and product model and number.
 - (2) Product substitutions or alternates utilized.
 - (3) Changes made by Addenda and Change Orders and written directives.

1.07 EXAMINATION OF EXISTING CONDITIONS

- A. Contractor shall be held to have examined the Project Site and acquainted itself with the conditions of the Site or of the streets or roads approaching the Site.
- B. Prior to commencement of Work, Contractor shall survey the Site and existing buildings and improvements to observe existing damage and defects such as cracks, sags, broken, missing or damaged glazing, other building elements and Site improvements, and other damage. See Section 00 31 19 Existing Conditions for additional verbiage pertaining to review of the site prior to the commencement of construction.
- C. Should Contractor observe cracks, sags, and other damage to and defects of the Site and adjacent buildings, paving, and other items not indicated in the Contract Documents, Contractor shall immediately report same to the District and the Architect.

1.08 CONTRACTOR'S USE OF PREMISES

- A. If unoccupied and only with District's prior written approval, Contractor may use the building(s) at the Project Site without limitation for its operations, storage, and office facilities for the performance of the Work. If the District chooses to beneficially occupy any building(s), Contractor must obtain the District's written approval for Contractor's use of spaces and types of operations to be performed within the building(s) while so occupied. Contractor's access to the building(s) shall be limited to the areas indicated.

- B. If the space at the Project Site is not sufficient for Contractor's operations, storage, office facilities and/or parking, Contractor shall arrange and pay for any additional facilities needed by Contractor.
- C. Contractor shall not interfere with use of or access to occupied portions of the building(s) or adjacent property.
- D. Contractor shall maintain corridors, stairs, halls, and other exit-ways of building clear and free of debris and obstructions at all times.
- E. No one other than those directly involved in the demolition and construction, or specifically designated by the District or the Architect shall be permitted in the areas of work during demolition and construction activities.
- F. The Contractor shall install the construction fence and maintain that it will be locked when not in use. Keys to this fencing will be provided to the District.

1.09 PROTECTION OF EXISTING STRUCTURES AND UTILITIES

- A. The Drawings show above-grade and below-grade structures, utility lines, and other installations that are known or believed to exist in the area of the Work. Contractor shall locate these existing installations before proceeding with excavation and other operations that could damage same; maintain them in service, where appropriate; and repair damage to them caused by the performance of the Work. Should damage occur to these existing installations, the costs of repair shall be at the Contractor's expense and made to the District's satisfaction.
- B. Contractor shall be alert to the possibility of the existence of additional structures and utilities. If Contractor encounters additional structures and utilities, Contractor will immediately report to the District for disposition of same as indicated in the General Conditions.

1.10 UTILITY SHUTDOWNS AND INTERRUPTIONS

- A. Contractor shall give the District a minimum of three (3) days written notice in advance of any need to shut off existing utility services or to effect equipment interruptions. The District will set exact time and duration for shutdown, and will assist Contractor with shutdown. Work required to re-establish utility services shall be performed by the Contractor.
- B. Contractor shall obtain District's written approval as indicated in the General Conditions in advance of deliveries of material or equipment or other activities that may conflict with District's use of the building(s) or adjacent facilities.

1.11 STRUCTURAL INTEGRITY

- A. Contractor shall be responsible for and supervise each operation and work that could affect structural integrity of various building elements, both permanent and temporary.
- B. Contractor shall include structural connections and fastenings as indicated or required for complete performance of the Work.

PART 2 – PRODUCTS Not Used.

PART 3 – EXECUTION Not Used.

END OF DOCUMENT

ALTERNATES AND UNIT PRICING

PART 1 – ALTERNATES

1.01 RELATED DOCUMENTS AND PROVISIONS:

All Contract Documents should be reviewed for applicable provisions related to the provisions in this document, including without limitation:

- A. General Conditions;
- B. Special Conditions;
- C. Bid Form and Proposal;
- D. Instruction to Bidders.

1.02 DESCRIPTION

The items of work indicated below propose modifications to, substitutions for, additions to and/or deletions from the various parts of the Work specified in other Sections of the Specifications. The acceptance or rejection of any of the alternates is strictly at the option of the District subject to District's acceptance of Contractor's stated prices contained in this Proposal.

1.03 GENERAL

Where an item is omitted, or scope of Work is decreased, all Work pertaining to the item whether specifically stated or not, shall be omitted and where an item is added or modified or where scope of Work is increased, all Work pertaining to that required to render same ready for use on the Project in accordance with intention of Drawings and Specifications shall be included in an agreed upon price amount.

1.04 BASE BID

The Base Bid includes all work required to construct the Project completely and in accordance with the Contract Documents.

1.05 ALTERNATES

- A. None

PART 2 - UNIT PRICING

2.01 GENERAL

Contractor shall completely state all required figures based on Unit Prices listed below. Where scope of Work is decreased, all Work pertaining to the item, whether specifically stated or not, shall be omitted and where scope of Work is increased, all work pertaining to that item required to render same ready for use on the Project in

accordance with intention of Drawings and Specifications shall be included in an agreed upon price amount.

2.02 UNIT PRICES

Furnish unit prices for each of the named items on a square foot, lineal foot, or per each basis, as applies. Unit prices shall include all labor, materials, services, profit, overhead, insurance, bonds, taxes, and all other incidental costs of Contractor, subcontractors, and supplier(s).

- A.** Item No. 1: Removal and replacement of plywood decking of the same thickness as the existing plywood deck under the direction of the District and/or their designated representative. Plywood sheathing shall be nailed in accordance with codes having jurisdiction. See bid form section 00 41 13.
- B.** Item No. 2: Removal and replacement of plank deck to match the existing thickness as the existing plank deck under the direction of the District and/or their designated representative. Plank sheathing shall be nailed in accordance with codes having jurisdiction. See bid form section 00 41 13.
- C.** Item No. 3: Removal and replacement or installation of new 2" x 4" wood blocking under the direction of the District and/or their designated representative. See bid form section 00 41 13.
- D.** Item No. 4: Removal and replacement or installation of new 2" x 6" wood blocking under the direction of the District and/or their designated representative. See bid form section 00 41 13.
- E.** Item No. 5: Removal and replacement or installation of new 2" x 8" wood blocking under the direction of the District and/or their designated representative. See bid form section 00 41 13.
- F.** Item No. 6: Removal and replacement or installation of new 2" x 10" wood blocking under the direction of the District and/or their designated representative. See bid form section 00 41 13.
- G.** Item no. 7: Removal and replacement or installation of new 2" x 12" wood blocking under the direction of the District and/or their designated representative. See bid form section 00 41 13.
- H.** Item no. 8: Removal and replacement or installation of new 4" x 4" wood blocking under the direction of the District and/or their designated representative. See bid form section 00 41 13.

END OF DOCUMENT

DOCUMENT 01 25 13
PRODUCT OPTIONS AND SUBSTITUTIONS

PART 1 - GENERAL

1.01 RELATED DOCUMENTS AND PROVISIONS

All Contract Documents should be reviewed for applicable provisions related to the provisions in this document, including without limitation:

- A. Instructions to Bidders;
- B. General Conditions, including, without limitation, Substitutions For Specified Items; and
- C. Special Conditions.

1.02 SUBSTITUTIONS OF MATERIALS AND EQUIPMENT:

- A. Catalog numbers and specific brands or trade names followed by the designation "or equal" are used in conjunction with material and equipment required by the Specifications to establish the standards of quality, utility, and appearance required. Substitutions which are equal in quality, utility, and appearance to those specified may be reviewed subject to the provisions of the General Conditions.
- B. Wherever more than one manufacturer's product is specified, the first-named product is the basis for the design used in the work and the use of alternative-named manufacturers' products or substitutes may require modifications in that design. If such alternatives are proposed by Contractor and are approved by the District and/or the Architect, Contractor shall assume all costs required to make necessary revisions and modifications of the design resulting from the substitutions requested by the Contractor.
- C. When materials and equipment are specified by first manufacturer's name and product number, second manufacturer's name and "or approved equal," supporting data for the second product, if proposed by Contractor, shall be submitted in accordance with the requirements for substitutions.
- D. If the District and/or Architect, in reviewing proposed substitute materials and equipment, require revisions or corrections to be made to previously accepted Shop Drawings and supplemental supporting data to be resubmitted, Contractor shall promptly do so. If any proposed substitution is judged by the District and/or Architect to be unacceptable, the specified material or equipment shall be provided.
- E. Samples may be required. Tests required by the District and/or Architect for the determination of quality and utility shall be made at the expense of Contractor, with acceptance of the test procedure first given by the District.
- F. In reviewing the supporting data submitted for substitutions, the District and/or Architect will use for purposes of comparison all the characteristics of

the specified material or equipment as they appear in the manufacturer's published data even though all the characteristics may not have been particularly mentioned in the Contract Documents. If more than two (2) submissions of supporting data are required, the cost of reviewing the additional supporting data shall be borne by Contractor, and the District will deduct the costs from the Contract Price.

PART 2 – PRODUCTS Not Used.

PART 3 – EXECUTION Not Used.

END OF DOCUMENT

DOCUMENT 01 26 00

CHANGES IN THE WORK

CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE PROVISIONS IN THE AGREEMENT, GENERAL CONDITIONS, AND SPECIAL CONDITIONS, IF USED, RELATED TO CHANGES AND/OR REQUESTS FOR CHANGES.

END OF DOCUMENT

DOCUMENT 01 29 00

**APPLICATION FOR PAYMENT AND
CONDITIONAL AND UNCONDITIONAL WAIVER AND RELEASE FORMS**

**CONTRACTOR SHALL COMPLY WITH ALL PROVISIONS IN THE GENERAL
CONDITIONS RELATED TO APPLICATIONS FOR PAYMENT AND/OR PAYMENTS.**

**CONDITIONAL WAIVER AND RELEASE
ON PROGRESS PAYMENT
(CIVIL CODE SECTION 8132)**

NOTICE: THIS DOCUMENT WAIVES THE CLAIMANT'S LIEN, STOP PAYMENT NOTICE, AND PAYMENT BOND RIGHTS EFFECTIVE ON RECEIPT OF PAYMENT. A PERSON SHOULD NOT RELY ON THIS DOCUMENT UNLESS SATISFIED THAT THE CLAIMANT HAS RECEIVED PAYMENT.

Name of Claimant: _____

Name of Customer: _____

Job Location: _____

Owner: _____

Through Date: _____

Conditional Waiver and Release

This document waives and releases lien, stop payment notice, and payment bond rights the claimant has for labor and service provided, and equipment and material delivered, to the customer on this job through the Through Date of this document. Rights based upon labor or service provided, or equipment or material delivered, pursuant to a written change order that has been fully executed by the parties prior to the date that this document is signed by the claimant, are waived and released by this document, unless listed as an Exception below. This document is effective only on the claimant's receipt of payment from the financial institution on which the following check is drawn:

Maker of Check: _____

Amount of Check: \$_____

Check Payable to: _____

Exceptions

This document does not affect any of the following:

- (1) Retentions.
- (2) Extras for which the claimant has not received payment.
- (3) The following progress payments for which the claimant has previously given a conditional waiver and release but has not received payment:

Date(s) of waiver and release: _____

Amount(s) of unpaid progress payment(s): \$_____

LODI UNIFIED SCHOOL DISTRICT

**APPLICATION FOR PAYMENT AND
CONDITIONAL AND UNCONDITIONAL
WAIVER AND RELEASE FORMS
DOCUMENT 01 29 00-2**

- (4) Contract rights, including (A) a right based on rescission, abandonment, or breach of contract, and (B) the right to recover compensation for work not compensated by the payment.

Claimant's Signature: _____

Claimant's Title: _____

Date of Signature: _____

**UNCONDITIONAL WAIVER AND RELEASE
ON PROGRESS PAYMENT
(CIVIL CODE SECTION 8134)**

NOTICE TO CLAIMANT: THIS DOCUMENT WAIVES AND RELEASES LIEN, STOP PAYMENT NOTICE, AND PAYMENT BOND RIGHTS UNCONDITIONALLY AND STATES THAT YOU HAVE BEEN PAID FOR GIVING UP THOSE RIGHTS. THIS DOCUMENT IS ENFORCEABLE AGAINST YOU IF YOU SIGN IT, EVEN IF YOU HAVE NOT BEEN PAID. IF YOU HAVE NOT BEEN PAID, USE A CONDITIONAL WAIVER AND RELEASE FORM.

Name of Claimant: _____

Name of Customer: _____

Job Location: _____

Owner: _____

Through Date: _____

Unconditional Waiver and Release

This document waives and releases lien, stop payment notice, and payment bond rights the claimant has for labor and service provided, and equipment and material delivered, to the customer on this job through the Through Date of this document. Rights based upon labor or service provided, or equipment or material delivered, pursuant to a written change order that has been fully executed by the parties prior to the date that this document is signed by the claimant, are waived and released by this document, unless listed as an Exception below. The claimant has received the following progress payment: \$_____

Exceptions

This document does not affect any of the following:

- (1) Retentions.
- (2) Extras for which the claimant has not received payment.
- (3) Contract rights, including (A) a right based on rescission, abandonment, or breach of contract, and (B) the right to recover compensation for work not compensated by the payment.

Claimant's Signature: _____

Claimant's Title: _____

Date of Signature: _____

**CONDITIONAL WAIVER AND RELEASE
ON FINAL PAYMENT
(CIVIL CODE SECTION 8136)**

NOTICE: THIS DOCUMENT WAIVES THE CLAIMANT'S LIEN, STOP PAYMENT NOTICE, AND PAYMENT BOND RIGHTS EFFECTIVE ON RECEIPT OF PAYMENT. A PERSON SHOULD NOT RELY ON THIS DOCUMENT UNLESS SATISFIED THAT THE CLAIMANT HAS RECEIVED PAYMENT.

Name of Claimant: _____

Name of Customer: _____

Job Location: _____

Owner: _____

Conditional Waiver and Release

This document waives and releases lien, stop payment notice, and payment bond rights the claimant has for labor and service provided, and equipment and material delivered, to the customer on this job. Rights based upon labor or service provided, or equipment or material delivered, pursuant to a written change order that has been fully executed by the parties prior to the date that this document is signed by the claimant, are waived and released by this document, unless listed as an Exception below. This document is effective only on the claimant's receipt of payment from the financial institution on which the following check is drawn:

Maker of Check:

Amount of Check: \$_____

Check Payable to: _____

Exceptions

This document does not affect any of the following: _____

Disputed claims for extras in the amount of: \$_____

Claimant's Signature: _____

Claimant's Title: _____

Date of Signature: _____

**UNCONDITIONAL WAIVER AND RELEASE
ON FINAL PAYMENT
(CIVIL CODE SECTION 8138)**

NOTICE TO CLAIMANT: THIS DOCUMENT WAIVES AND RELEASES LIEN, STOP PAYMENT NOTICE, AND PAYMENT BOND RIGHTS UNCONDITIONALLY AND STATES THAT YOU HAVE BEEN PAID FOR GIVING UP THOSE RIGHTS. THIS DOCUMENT IS ENFORCEABLE AGAINST YOU IF YOU SIGN IT, EVEN IF YOU HAVE NOT BEEN PAID. IF YOU HAVE NOT BEEN PAID, USE A CONDITIONAL WAIVER AND RELEASE FORM.

Name of Claimant: _____

Name of Customer: _____

Job Location: _____

Owner: _____

Unconditional Waiver and Release

This document waives and releases lien, stop payment notice, and payment bond rights the claimant has for all labor and service provided, and equipment and material delivered, to the customer on this job. Rights based upon labor or service provided, or equipment or material delivered, pursuant to a written change order that has been fully executed by the parties prior to the date that this document is signed by the claimant, are waived and released by this document, unless listed as an Exception below. The claimant has been paid in full.

Exceptions

This document does not affect any of the following: _____

Disputed claims for extras in the amount of: \$_____

Claimant's Signature: _____

Claimant's Title: _____

Date of Signature: _____

PROJECT MEETINGS

PART 1 – GENERAL

1.01 RELATED DOCUMENTS AND PROVISIONS:

All Contract Documents should be reviewed for applicable provisions related to the provisions in this document, including without limitation:

- A. General Conditions; and
- B. Special Conditions.

1.02 PROGRESS MEETINGS:

- A. Contractor shall schedule and hold regular weekly progress meetings after a minimum of one week's prior written notice of the meeting date and time to all Invitees as indicated below.
- B. Location: Contractor's field office or in a location designated by the District if there is no provision for a District and/or Contractor's field office in the contract documents.
- C. The Contractor shall notify and invite the following entities ("Invitees"):
 - (1) District Representative.
 - (2) Contractor.
 - (3) Contractor's Project Manager.
 - (4) Contractor's Superintendent.
 - (5) Subcontractors, as appropriate to the agenda of the meeting.
 - (6) Suppliers, as appropriate to the agenda of the meeting.
 - (7) Construction Manager, if any.
 - (8) Architect
 - (9) Engineer(s), if any and as appropriate to the agenda of the meeting.
 - (10) Others, as appropriate to the agenda of the meeting.
- D. The District's, the Architect's, and/or an engineer's Consultants will attend at their discretion, in response to the agenda.
- E. The District representative, the Construction Manager, and/or another District Agent shall take and distribute meeting notes to attendees and other

concerned parties. If exceptions are taken to anything in the meeting notes, those exceptions shall be stated in writing to the District within three (3) working days following District's distribution of the meeting notes.

1.03 PRE-INSTALLATION/PERFORMANCE MEETING:

- A. Contractor shall schedule a pre-installation meeting prior to the start of portions of the Work as outlined in each specification section, if so requested in that specification section, but as a minimum there shall be such a meeting for the below listed scopes of Work. Contractor shall invite all Invitees to this meeting, and others whose work may affect or be affected by the quality of the cutting and patching work.
 - (1) Cutting and patching of plaster and roofing, and other weather-exposed and moisture-resistant products.
 - (2) Prior to the start of the different facets of this contract contractor shall schedule a pre-installation meeting with the District, CM, and other contractors affected by this work.
- B. Contractor shall review in detail prior to this meeting, the manufacturer's requirements and specifications, applicable portions of the Contract Documents, Shop Drawings, and other submittals, and other related work. At this meeting, invitees shall review and resolve conflicts, incompatibilities, or inadequacies discovered or anticipated.
- C. Contractor shall review in detail Project conditions, schedule, requirements for performance, application, installation, and quality of completed Work, and protection of adjacent Work and property.
- D. Contractor shall review in detail means of protecting the completed Work during the remainder of the construction period.

PART 2 - PRODUCTS Not Used.

PART 3 - EXECUTION Not Used.

END OF DOCUMENT

SCHEDULING OF WORK

PART 1 – GENERAL

1.01 RELATED DOCUMENTS AND PROVISIONS:

All Contract Documents should be reviewed for applicable provisions related to the provisions in this document, including without limitation:

- A. General Conditions;
- B. Special Conditions;
- C. Summary of Work; and
- D. Submittals.

1.02 SECTION INCLUDES:

- A. Scheduling of Work under this Contract shall be performed by Contractor in accordance with requirements of this Section.
 - (1) Development of schedule, cost and resource loading of the schedule, monthly payment requests, and project status reporting requirements of the Contract shall employ computerized Critical Path Method ("CPM") scheduling ("CPM Schedule").
 - (2) CPM Schedule shall be cost loaded based on Schedule of Values as approved by District.
 - (3) Submit schedules and reports as specified in the General Conditions.
- B. Upon Award of Contract, Contractor shall immediately commence development of Initial and Original CPM Schedules to ensure compliance with CPM Schedule submittal requirements.

1.03 CONSTRUCTION SCHEDULE:

- A. Within five (5) days of being awarded the Contract and before request for first progress payment, the Contractor shall prepare and submit to the Project Manager a construction progress schedule conforming to the Milestone Schedule below.
- B. The Construction Schedule shall be continuously updated, and an updated schedule shall be submitted with each application for progress payment. Each revised schedule shall indicate the work actually accomplished during the previous period and the schedule for completion of the remaining work.

C. Milestone Schedule:

ACTIVITY DESCRIPTION	REQUIRED COMPLETION
CONSTRUCTION STARTS	July 3, 2023
SUBSTANTIAL COMPLETION	July 30, 2023
FINAL PROJECT COMPLETION	August 18, 2023

1.04 QUALIFICATIONS

- A. Contractor shall employ experienced scheduling personnel qualified to use the latest version of [i.e., Primavera Project Planner]. Experience level required is set forth below. Contractor may employ such personnel directly or may employ a consultant for this purpose.
- (1) The written statement shall identify the individual who will perform CPM scheduling.
 - (2) Capability and experience shall be verified by description of construction projects on which individual has successfully applied computerized CPM.
 - (3) Required level of experience shall include at least two (2) projects of similar nature and scope with value not less than three fourths ($\frac{3}{4}$) of the Total Bid Price of this Project. The written statement shall provide contact persons for referenced projects with current telephone and address information.
- B. District reserves the right to approve or reject Contractor's scheduler or consultant at any time. District reserves the right to refuse replacing of Contractor's scheduler or consultant, if District believes replacement will negatively affect the scheduling of Work under this Contract.

1.05 GENERAL

- A. Progress Schedule shall be based on and incorporate milestone and completion dates specified in Contract Documents.
- B. Overall time of completion and time of completion for each milestone shown on Progress Schedule shall adhere to times in the Contract, unless an earlier (advanced) time of completion is requested by Contractor and agreed to by District. Any such agreement shall be formalized by a Change Order.
- (1) District is not required to accept an early completion schedule, i.e., one that shows an earlier completion date than the Contract Time.
 - (2) Contractor shall not be entitled to extra compensation in event agreement is reached on an earlier completion schedule and Contractor completes its Work, for whatever reason, beyond completion date shown in its early completion schedule but within the Contract Time.

- (3) A schedule showing the work completed in less than the Contract Time, and that has been accepted by District, shall be considered to have Project Float. The Project Float is the time between the scheduled completion of the work and the Completion Date. Project Float is a resource available to both District and the Contractor.
- C. Ownership Project Float: Neither the District nor Contractor owns Project Float. The Project owns the Project Float. As such, liability for delay of the Completion Date rests with the party whose actions, last in time, actually cause delay to the Completion Date.
 - (1) For example, if Party A uses some, but not all of the Project Float and Party B later uses remainder of the Project Float as well as additional time beyond the Project Float, Party B shall be liable for the time that represents a delay to the Completion Date.
 - (2) Party A would not be responsible for the time since it did not consume the entire Project Float and additional Project Float remained; therefore, the Completion Date was unaffected by Party A.
- D. Progress Schedule shall be the basis for evaluating job progress, payment requests, and time extension requests. Responsibility for developing Contract CPM Schedule and monitoring actual progress as compared to Progress Schedule rests with Contractor.
- E. Failure of Progress Schedule to include any element of the Work, or any inaccuracy in Progress Schedule, will not relieve Contractor from responsibility for accomplishing the Work in accordance with the Contract. District's acceptance of schedule shall be for its use in monitoring and evaluating job progress, payment requests, and time extension requests and shall not, in any manner, impose a duty of care upon District, or act to relieve Contractor of its responsibility for means and methods of construction.
- F. Software: Use **[i.e., District Project Planner for Windows, latest version]**. Such software shall be compatible with Windows operating system. Contractor shall transmit contract file to District on compact disk at times requested by District.
- G. Transmit each item under the form approved by District.
 - (1) Identify Project with District Contract number and name of Contractor.
 - (2) Provide space for Contractor's approval stamp and District's review stamps.
 - (3) Submittals received from sources other than Contractor will be returned to the Contractor without District's review.

1.06 INITIAL CPM SCHEDULE

- A. Initial CPM Schedule submitted for review at the pre-construction conference shall serve as Contractor's schedule for up to ninety (90) calendar days after the Notice to Proceed.

- B. Indicate detailed plan for the Work to be completed in first ninety (90) days of the Contract; details of planned mobilization of plant and equipment; sequence of early operations; procurement of materials and equipment. Show Work beyond ninety (90) calendar days in summary form.
- C. Initial CPM Schedule shall be time scaled.
- D. Initial CPM Schedule shall be cost and resource loaded. Accepted cost and resource loaded schedule will be used as basis for monthly progress payments until acceptance of the Original CPM Schedule. Use of Initial CPM Schedule for progress payments shall not exceed ninety (90) calendar days.
- E. District and Contractor shall meet to review and discuss the Initial CPM Schedule within seven (7) calendar days after it has been submitted to District.
 - (1) District's review and comment on the schedule shall be limited to Contract conformance (with sequencing, coordination, and milestone requirements).
 - (2) Contractor shall make corrections to schedule necessary to comply with Contract requirements and shall adjust schedule to incorporate any missing information requested by District. Contractor shall resubmit Initial CPM Schedule if requested by District.
- F. If, during the first ninety (90) days after Notice to Proceed, the Contractor is of the opinion that any of the Work included on its Initial CPM Schedule has been impacted, the Contractor shall submit to District a written Time Impact Evaluation ("TIE") in accordance with Article 1.12 of this Section. The TIE shall be based on the most current update of the Initial CPM Schedule.

1.07 ORIGINAL CPM SCHEDULE

- A. Submit a detailed proposed Original CPM Schedule presenting an orderly and realistic plan for completion of the Work in conformance with requirements as specified herein.
- B. Progress Schedule shall include or comply with following requirements:
 - (1) Time scaled, cost and resource (labor and major equipment) loaded CPM schedule.
 - (2) No activity on schedule shall have duration longer than fifteen (15) work days, with exception of submittal, approval, fabrication and procurement activities, unless otherwise approved by District.
 - (a) Activity durations shall be total number of actual work days required to perform that activity.
 - (3) The start and completion dates of all items of Work, their major components, and milestone completion dates, if any.

- (4) District furnished materials and equipment, if any, identified as separate activities.
- (5) Activities for maintaining Project Record Documents.
- (6) Dependencies (or relationships) between activities.
- (7) Processing/approval of submittals and shop drawings for all material and equipment required per the Contract. Activities that are dependent on submittal acceptance or material delivery shall not be scheduled to start earlier than expected acceptance or delivery dates.
 - (a) Include time for submittals, re-submittals and reviews by District. Coordinate with accepted schedule for submission of Shop Drawings, samples, and other submittals.
 - (b) Contractor shall be responsible for all impacts resulting from re-submittal of Shop Drawings and submittals.
- (8) Procurement of major equipment, through receipt and inspection at jobsite, identified as separate activity.
 - (a) Include time for fabrication and delivery of manufactured products for the Work.
 - (b) Show dependencies between procurement and construction.
- (9) Activity description; what Work is to be accomplished and where.
- (10) The total cost of performing each activity shall be total of labor, material, and equipment, excluding overhead and profit of Contractor. Overhead and profit of the General Contractor shall be shown as a separate activity in the schedule. Sum of cost for all activities shall equal total Contract value.
- (11) Resources required (labor and major equipment) to perform each activity.
- (12) Responsibility code for each activity corresponding to Contractor or Subcontractor responsible for performing the Work.
- (13) Identify the activities which constitute the controlling operations or critical path. No more than twenty-five (25%) of the activities shall be critical or near critical. Near critical is defined as float in the range of one (1) to (10) days.
- (14) Ten (10) workdays for developing punch list(s), completion of punch-list items, and final clean up for the Work or any designated portion thereof. No other activities shall be scheduled during this period.
- (15) Interface with the work of other contractors, District, and agencies such as, but not limited to, utility companies.

- (16) Show detailed Subcontractor Work activities. In addition, furnish copies of Subcontractor schedules upon which CPM was built.
 - (a) Also furnish for each Subcontractor, as determined by District, submitted on Subcontractor letterhead, a statement certifying that Subcontractor concurs with Contractor's Original CPM Schedule and that Subcontractor's related schedules have been incorporated, including activity duration, cost and resource loading.
 - (b) Subcontractor schedules shall be independently derived and not a copy of Contractor's schedule.
 - (c) In addition to Contractor's schedule and resource loading, obtain from electrical, mechanical, and plumbing Subcontractors, and other Subcontractors as required by District, productivity calculations common to their trades, such as units per person day, feet of pipe per day per person, feet of wiring per day per person, and similar information.
 - (d) Furnish schedule for Contractor/Subcontractor CPM schedule meetings which shall be held prior to submission of Original CPM schedule to District. District shall be permitted to attend scheduled meetings as an observer.
- (17) Activity durations shall be in Work days.
- (18) Submit with the schedule a list of anticipated non Work days, such as weekends and holidays. The Progress Schedule shall exclude in its Work day calendar all non Work days on which Contractor anticipates critical Work will not be performed.
- C. Original CPM Schedule Review Meeting: Contractor shall, within ten (10) days from the Notice to Proceed date, meet with District to review the Original CPM Schedule submittal.
 - (1) Contractor shall have its Project Manager, Project Superintendent, Project Scheduler, and key Subcontractor representatives, as required by District, in attendance. The meeting will take place over a continuous one (1) day period.
 - (2) District's review will be limited to submittal's conformance to Contract requirements including, but not limited to, coordination requirements. However, review may also include:
 - (a) Clarifications of Contract Requirements.
 - (b) Directions to include activities and information missing from submittal.
 - (c) Requests to Contractor to clarify its schedule.

- (3) Within five (5) days of the Schedule Review Meeting, Contractor shall respond in writing to all questions and comments expressed by District at the Meeting.

1.08 ADJUSTMENTS TO CPM SCHEDULE

- A. Adjustments to Original CPM Schedule: Contractor shall have adjusted the Original CPM Schedule submittal to address all review comments from original CPM Schedule review meeting and resubmit network diagrams and reports for District's review.
 - (1) District, within ten (10) days from date that Contractor submitted the revised schedule, will either:
 - (a) Accept schedule and cost and resource loaded activities as submitted, or
 - (b) Advise Contractor in writing to review any part or parts of schedule which either do not meet Contract requirements or are unsatisfactory for District to monitor Project's progress, resources, and status or evaluate monthly payment request by Contractor.
 - (2) District may accept schedule with conditions that the first monthly CPM Schedule update be revised to correct deficiencies identified.
 - (3) When schedule is accepted, it shall be considered the "Original CPM Schedule" which will then be immediately updated to reflect the current status of the work.
 - (4) District reserves right to require Contractor to adjust, add to, or clarify any portion of schedule which may later be discovered to be insufficient for monitoring of Work or approval of partial payment requests. No additional compensation will be provided for such adjustments, additions, or clarifications.
- B. Acceptance of Contractor's schedule by District will be based solely upon schedule's compliance with Contract requirements.
 - (1) By way of Contractor assigning activity durations and proposing sequence of Work, Contractor agrees to utilize sufficient and necessary management and other resources to perform work in accordance with the schedule.
 - (2) Upon submittal of schedule update, updated schedule shall be considered "current" CPM Schedule.
 - (3) Submission of Contractor's schedule to District shall not relieve Contractor of total responsibility for scheduling, sequencing, and pursuing Work to comply with requirements of Contract Documents, including adverse effects such as delays resulting from ill timed Work.

- C. Submittal of Original CPM Schedule, and subsequent schedule updates, shall be understood to be Contractor's representation that the Schedule meets requirements of Contract Documents and that Work shall be executed in sequence indicated on the schedule.
- D. Contractor shall distribute Original CPM Schedule to Subcontractors for review and written acceptance, which shall be noted on Subcontractors' letterheads to Contractor and transmitted to District for the record.

1.09 MONTHLY CPM SCHEDULE UPDATE SUBMITTALS

- A. Following acceptance of Contractor's Original CPM Schedule, Contractor shall monitor progress of Work and adjust schedule each month to reflect actual progress and any anticipated changes to planned activities.
 - (1) Each schedule update submitted shall be complete, including all information requested for the Original CPM Schedule submittal.
 - (2) Each update shall continue to show all Work activities including those already completed. These completed activities shall accurately reflect "as built" information by indicating when activities were actually started and completed.
- B. A meeting will be held on approximately the twenty fifth (25th) of each month to review the schedule update submittal and progress payment application.
 - (1) At this meeting, at a minimum, the following items will be reviewed: Percent (%) complete of each activity; Time Impact Evaluations for Change Orders and Time Extension Request; actual and anticipated activity sequence changes; actual and anticipated duration changes; and actual and anticipated Contractor delays.
 - (2) These meetings are considered a critical component of overall monthly schedule update submittal and Contractor shall have appropriate personnel attend. At a minimum, these meetings shall be attended by Contractor's General Superintendent and Scheduler.
 - (3) Contractor shall plan on the meeting taking no less than four (4) hours.
- C. Within five (5) working days after monthly schedule update meeting, Contractor shall submit the updated CPM Schedule update.
- D. Within five (5) work days of receipt of above noted revised submittals, District will either accept or reject monthly schedule update submittal.
 - (1) If accepted, percent (%) complete shown in monthly update will be basis for Application for Payment by the Contractor. The schedule update shall be submitted as part of the Contractor's Application for Payment.
 - (2) If rejected, update shall be corrected and resubmitted by Contractor before the Application for Payment is submitted.

- E. Neither updating, changing or revising of any report, curve, schedule, or narrative submitted to District by Contractor under this Contract, nor District's review or acceptance of any such report, curve, schedule or narrative shall have the effect of amending or modifying in any way the Completion Date or milestone dates or of modifying or limiting in any way Contractor's obligations under this Contract.

1.10 SCHEDULE REVISIONS

- A. Updating the Schedule to reflect actual progress shall not be considered revisions to the Schedule. Since scheduling is a dynamic process, revisions to activity durations and sequences are expected on a monthly basis.
- B. To reflect revisions to the schedule, the Contractor shall provide District with a written narrative with a full description and reasons for each Work activity revised. For revisions affecting the sequence of work, the Contractor shall provide a schedule diagram which compares the original sequence to the revised sequence of work. The Contractor shall provide the written narrative and schedule diagram for revisions two (2) working days in advance of the monthly schedule update meeting.
- C. Schedule revisions shall not be incorporated into any schedule update until the revisions have been reviewed by District. District may request further information and justification for schedule revisions and Contractor shall, within three (3) days, provide District with a complete written narrative response to District's request.
- D. If the Contractor's revision is still not accepted by District, and the Contractor disagrees with District's position, the Contractor has seven (7) calendar days from receipt of District's letter rejecting the revision to provide a written narrative providing full justification and explanation for the revision. The Contractor's failure to respond in writing within seven (7) calendar days of District's written rejection of a schedule revision shall be contractually interpreted as acceptance of District's position, and the Contractor waives its rights to subsequently dispute or file a claim regarding District's position.
- E. At District's discretion, the Contractor can be required to provide Subcontractor certifications of performance regarding proposed schedule revisions affecting said Subcontractors.

1.11 RECOVERY SCHEDULE

- A. If the Schedule Update shows a completion date twenty-one (21) calendar days beyond the Contract Completion Date, or individual milestone completion dates, the Contractor shall submit to District the proposed revisions to recover the lost time within seven (7) calendar days. As part of this submittal, the Contractor shall provide a written narrative for each revision made to recapture the lost time. If the revisions include sequence changes, the Contractor shall provide a schedule diagram comparing the original sequence to the revised sequence of work.
- B. The revisions shall not be incorporated into any schedule update until the revisions have been reviewed by District.

- C. If the Contractor's revisions are not accepted by District, District and the Contractor shall follow the procedures in paragraph 1.09.C, 1.09.D and 1.09.E above.
- D. At District's discretion, the Contractor can be required to provide Subcontractor certifications for revisions affecting said Subcontractors.

1.12 TIME IMPACTS EVALUATION ("TIE") FOR CHANGE ORDERS, AND OTHER DELAYS

- A. When Contractor is directed to proceed with changed Work, the Contractor shall prepare and submit within fourteen (14) calendar days from the Notice to Proceed a TIE which includes both a written narrative and a schedule diagram depicting how the changed Work affects other schedule activities. The schedule diagram shall show how the Contractor proposes to incorporate the changed Work in the schedule and how it impacts the current schedule-update critical path. The Contractor is also responsible for requesting time extensions based on the TIE's impact on the critical path. The diagram must be tied to the main sequence of schedule activities to enable District to evaluate the impact of changed Work to the scheduled critical path.
- B. Contractor shall be required to comply with the requirements of Paragraph 1.09.A for all types of delays such as, but not limited to, Contractor/Subcontractor delays, adverse weather delays, strikes, procurement delays, fabrication delays, etc.
- C. Contractor shall be responsible for all costs associated with the preparation of TIEs, and the process of incorporating them into the current schedule update. The Contractor shall provide District with four (4) copies of each TIE.
- D. Once agreement has been reached on a TIE, the Contract Time will be adjusted accordingly. If agreement is not reached on a TIE, the Contract Time may be extended in an amount District allows, and the Contractor may submit a claim for additional time claimed by contractor.

1.13 TIME EXTENSIONS

- A. The Contractor is responsible for requesting time extensions for time impacts that, in the opinion of the Contractor, impact the critical path of the current schedule update. Notice of time impacts shall be given in accord with the General Conditions.
- B. Where an event for which District is responsible impacts the projected Completion Date, the Contractor shall provide a written mitigation plan, including a schedule diagram, which explains how (e.g., increase crew size, overtime, etc.) the impact can be mitigated. The Contractor shall also include a detailed cost breakdown of the labor, equipment, and material the Contractor would expend to mitigate District-caused time impact. The Contractor shall submit its mitigation plan to District within fourteen (14) calendar days from the date of discovery of the impact. The Contractor is responsible for the cost to prepare the mitigation plan.

- C. Failure to request time, provide TIE, or provide the required mitigation plan will result in Contractor waiving its right to a time extension and cost to mitigate the delay.
- D. No time will be granted under this Contract for cumulative effect of changes.
- E. District will not be obligated to consider any time extension request unless the Contractor complies with the requirements of Contract Documents.
- F. Failure of the Contractor to perform in accordance with the current schedule update shall not be excused by submittal of time extension requests.
- G. If the Contractor does not submit a TIE within the required fourteen (14) calendar days for any issue, it is mutually agreed that the Contractor does not require a time extension for said issue.

1.14 SCHEDULE REPORTS

- A. Submit four (4) copies of the following reports with the Initial CPM Schedule, the Original CPM Schedule, and each monthly update.
- B. Required Reports:
 - (1) Two activity listing reports: one sorted by activity number and one by total Project Float. These reports shall also include each activity's early/late and actual start and finish dates, original and remaining duration, Project Float, responsibility code, and the logic relationship of activities.
 - (2) Cost report sorted by activity number including each activity's associated cost, percentage of Work accomplished, earned value- to date, previous payments, and amount earned for current update period.
 - (3) Schedule plots presenting time-scaled network diagram showing activities and their relationships with the controlling operations or critical path clearly highlighted.
 - (4) Cash flow report calculated by early start, late start, and indicating actual progress. Provide an exhibit depicting this information in graphic form.
 - (5) Planned versus actual resource (i.e., labor) histogram calculated by early start and late start.

C. Other Reports

In addition to above reports, District may request, from month to month, any two of the following reports. Submit four (4) copies of all reports.

- (1) Activities by early start.
- (2) Activities by late start.

- (3) Activities grouped by Subcontractors or selected trades.
- (4) Activities with scheduled early start dates in a given time frame, such as fifteen (15) or thirty (30) day outlook.
- D. Furnish District with report files on compact disks containing all schedule files for each report generated.

1.15 PROJECT STATUS REPORTING

- A. In addition to submittal requirements for CPM scheduling identified in this Section, Contractor shall provide a monthly project status report (i.e., written narrative report) to be submitted in conjunction with each CPM Schedule as specified herein. Status reporting shall be in form specified below.
- B. Contractor shall prepare monthly written narrative reports of status of Project for submission to District. Written status reports shall include:
 - (1) Status of major Project components (percent (%) complete, amount of time ahead or behind schedule) and an explanation of how Project will be brought back on schedule if delays have occurred.
 - (2) Progress made on critical activities indicated on CPM Schedule.
 - (3) Explanations for any lack of work on critical path activities planned to be performed during last month.
 - (4) Explanations for any schedule changes, including changes to logic or to activity durations.
 - (5) List of critical activities scheduled to be performed next month.
 - (6) Status of major material and equipment procurement.
 - (7) Any delays encountered during reporting period.
 - (8) Contractor shall provide printed report indicating actual versus planned resource loading for each trade and each activity. This report shall be provided on weekly and monthly basis.
 - (a) Actual resource shall be accumulated in field by Contractor, and shall be as noted on Contractor's daily reports. These reports will be basis for information provided in computer-generated monthly and weekly printed reports.
 - (b) Contractor shall explain all variances and mitigation measures.
 - (9) Contractor may include any other information pertinent to status of Project. Contractor shall include additional status information requested by District at no additional cost.

- (10) Status reports, and the information contained therein, shall not be construed as claims, notice of claims, notice of delay, or requests for changes or compensation.

1.16 WEEKLY SCHEDULE REPORT

At the Weekly Progress Meeting, the Contractor shall provide and present a time-scaled three (3) week look-ahead schedule that is based and correlated by activity number to the current schedule (i.e., Initial, Original CPM, or Schedule Update).

1.17 DAILY CONSTRUCTION REPORTS

On a daily basis, Contractor shall submit a daily activity report to District for each workday, including weekends and holidays when worked. Contractor shall develop the daily construction reports on a computer-generated database capable of sorting daily Work, manpower, and manhours by Contractor, Subcontractor, area, sub-area, and Change Order Work. Upon request of District, furnish computer disk of this data base. Obtain District's written approval of daily construction report data base format prior to implementation. Include in report:

- A. Project name and Project number.
- B. Contractor's name and address.
- C. Weather, temperature, and any unusual site conditions.
- D. Brief description and location of the day's scheduled activities and any special problems and accidents, including Work of Subcontractors. Descriptions shall be referenced to CPM scheduled activities.
- E. Worker quantities for its own Work force and for Subcontractors of any tier.
- F. Equipment, other than hand tools, utilized by Contractor and Subcontractors.

1.18 PERIODIC VERIFIED REPORTS

Contractor shall complete and verify construction reports on a form prescribed by the Division of the State Architect and file reports on the first day of February, May, August, and November during the preceding quarter year; at the completion of the Contract; at the completion of the Work; at the suspension of Work for a period of more than one (1) month; whenever the services of Contractor or any of Contractor's Subcontractors are terminated for any reason; and at any time a special verified report is required by the Division of the State Architect. Refer to section 4-336 and section 4-343 of Part 1, Title 24 of the California Code of Regulations.

PART 2 – PRODUCTS Not Used.

PART 3 - EXECUTION Not Used.

END OF DOCUMENT

SUBMITTALS

PART 1 - GENERAL

1.01 RELATED DOCUMENTS AND PROVISIONS:

All Contract Documents should be reviewed for applicable provisions related to the provisions in this document, including without limitation:

- A. General Conditions, including, without limitation, Contractor's Submittals and Schedules, Drawings and Specifications;
- B. Special Conditions.

1.02 SECTION INCLUDES:

- A. Definitions:
 - (1) Shop Drawings and Product Data are as indicated in the General Conditions and include, but are not limited to, fabrication, erection, layout and setting drawings, formwork and falsework drawings, manufacturers' standard drawings, descriptive literature, catalogues, brochures, performance and test data, wiring and control diagrams. In addition, there are 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 all positions conform to the requirement of the Contract Documents, including, without limitation, the Drawings.
 - (2) "Manufactured" applies to standard units usually mass-produced; "fabricated" means specifically assembled or made out of selected materials to meet design requirements. Shop Drawings shall establish the actual detail of manufactured or fabricated items, indicated proper relation to adjoining work and amplify design details of mechanical and electrical equipment in proper relation to physical spaces in the structure.
 - (3) Manufacturer's Instructions: Where any item of Work is required by the Contract Documents to be furnished, installed, or performed, at a minimum, in accordance with a specified product manufacturer's instructions, the Contractor shall procure and distribute copies of these to the District, the Architect, and all other concerned parties and shall furnish, install, or perform the work, at a minimum, in accordance with those instructions.
- B. Samples, Shop Drawings, Product Data, and other items as specified, in accordance with the following requirements:

- (1) Contractor shall submit all Shop Drawings, Product Data, and Samples to the District, the Architect, the Project Inspector, and the Construction Manager.
- (2) Contractor shall comply with all time frames herein and in the General Conditions and, in any case, shall submit required information in sufficient time to permit proper consideration and action before ordering any materials or items represented by such Shop Drawings, Product Data, and/or Samples.
- (3) Contractor shall comply with all time frames herein and in the General Conditions and, in any case, shall allow sufficient time so that no delay occurs due to required lead time in ordering or delivery of any item to the Site. Contractor shall be responsible for any delay in progress of Work due to its failure to observe these requirements.
- (4) Time for completion of Work shall not be extended on account of Contractor's failure to promptly submit Shop Drawings, Product Data, and/or Samples.
- (5) Reference numbers on Shop Drawings shall have Architectural and/or Engineering Contract Drawings reference numbers for details, sections, and "cuts" shown on Shop Drawings. These reference numbers shall be in addition to any numbering system that Contractor chooses to use or has adopted as standard.
- (6) When the magnitude or complexity of submittal material prevents a complete review within the stated time frame, Contractor shall make this submittal in increments to avoid extended delays.
- (7) Contractor shall certify on submittals for review that submittals conform to Contract requirements. In event of any variance, Contractor shall specifically state in transmittal and on Shop Drawings, portions vary and require approval of a substitute. Also certify that Contractor-furnished equipment can be installed in allocated space.
- (8) Unless specified otherwise, sampling, preparation of samples, and tests shall be in accordance with the latest standard of the American Society for Testing and Materials.
- (9) Upon demand by Architect or District, Contractor shall submit samples of materials and/or articles for tests or examinations and consideration before Contractor incorporates same in Work. Contractor shall be solely responsible for delays due to sample(s) not being submitted in time to allow for tests. Acceptance or rejection will be expressed in writing. Work shall be equal to approved samples in every respect. Samples that are of value after testing will remain the property of Contractor.

C. Submittal Schedule:

- (1) Contractor shall prepare its proposed submittal schedule that is coordinated with their proposed construction schedule and submit both

to the District within ten (10) days after the date of the Notice to Proceed. Contractor's proposed schedules shall become the Project Construction Schedule and the Project Submittal Schedule after each is approved by the District.

- (2) Contractor is responsible for all lost time should the initial submittal be rejected, marked "revised and resubmit", etc.
- (3) All Submittals shall be forwarded to the District by the date indicated on the approved Submittal Schedule, unless an earlier date is necessary to maintain the Construction Schedule, in which case those Submittals shall be forwarded to the District so as not to delay the Construction Schedule.

1.03 SHOP DRAWINGS:

- A. Contractor shall submit one reproducible transparency and six (6) opaque reproductions. The District will review and return the reproducible copy and one (1) opaque reproduction to Contractor.
- B. Before commencing installation of any Work, the Contractor shall submit and receive approval of all drawings, descriptive data, and material list(s) as required to accomplish Work.
- C. Review of Shop Drawings is regarded as a service to assist Contractor and in all cases original Contract Documents shall take precedence as outlined under General Conditions.
- D. No claim for extra time or payment shall be based on work shown on Shop Drawings unless the claim is (1) noted on Contractor's transmittal letter accompanying Shop Drawings and (2) Contractor has complied with all applicable provisions of the General Conditions, including, without limitation, provisions regarding changes and payment, and all required written approvals.
- E. District shall not review Shop Drawings for quantities of materials or number of items supplied.
- F. District's and/or Architect's review of Shop Drawing will be general. District and/or Architect review does not relieve Contractor of responsibility for dimensions, accuracy, proper fitting, construction of Work, furnishing of materials, or Work required by Contract Documents and not indicated on Shop Drawings. Shop Drawing reviewed by District and/or Architect is not to be construed as approving departures from Contract Documents.
- G. Review of Shop Drawings and Schedules does not relieve Contractor from responsibility for any aspect of those Drawings or Schedules that is a violation of local, County, State, or Federal laws, rules, ordinances, or rules and regulations of commissions, boards, or other authorities or utilities having jurisdiction.
- H. Before submitting Shop Drawings for review, Contractor shall check Shop Drawings of its subcontractors for accuracy, and confirm that all Work

contiguous with and having bearing on other work shown on Shop Drawings is accurately drawn and in conformance with Contract Documents.

- I. Submitted drawings and details must bear stamp of approval of Contractor:
 - (1) Stamp and signature shall clearly certify that Contractor has checked Shop Drawings for compliance with Drawings.
 - (2) If Contractor submits a Shop Drawing without an executed stamp of approval, or whenever it is evident (despite stamp) that Drawings have not been checked, the District and/or Architect will not consider them and will return them to the Contractor for revision and resubmission. In that event, it will be deemed that Contractor has not complied with this provision and Contractor shall bear risk of all delays to same extent as if it had not submitted any Shop Drawings or details.
- J. Submission of Shop Drawings (in either original submission or when resubmitted with correction) constitutes evidence that Contractor has checked all information thereon and that it accepts and is willing to perform Work as shown.
- K. Contractor shall pay for cost of any changes in construction due to improper checking and coordination. Contractor shall be responsible for all additional costs, including coordination. Contractor shall be responsible for costs incurred by itself, the District, the Architect, the Project Inspector, the Construction Manager, any other Subcontractor or contractor, etc., due to improperly checked and/or coordination of submittals.
- L. Shop Drawings must clearly delineate the following information:
 - (1) Project name and address.
 - (2) Specification number and description.
 - (3) Architect's name and project number.
 - (4) Shop Drawing title, number, date, and scale.
 - (5) Names of Contractor, Subcontractor(s) and fabricator.
 - (6) Working and erection dimensions.
 - (7) Arrangements and sectional views.
 - (8) Necessary details, including complete information for making connections with other Work.
 - (9) Kinds of materials and finishes.
 - (10) Descriptive names of materials and equipment, classified item numbers, and locations at which materials or equipment are to be

installed in the Work. Contractor shall use same reference identification(s) as shown on Contract Drawings.

- M. Contractor shall prepare composite drawings and installation layouts when required to solve tight field conditions.
 - (1) Shop Drawings shall consist of dimensioned plans and elevations and must give complete information, particularly as to size and location of sleeves, inserts, attachments, openings, conduits, ducts, boxes, structural interferences, etc.
 - (2) Contractor shall coordinate these composite Shop Drawings and installation layouts in the field between itself and its Subcontractor(s) for proper relationship to the Work, the work of other trades, and the field conditions. The Contractor shall check and approve all submittal(s) before submitting them for final review.

1.04 PRODUCT DATA OR NON REPRODUCIBLE SUBMITTALS:

- A. Contractor shall submit manufacturer's printed literature in original form. Any fading type of reproduction will not be accepted. Contractor must submit a minimum of six (6) each, to the District. District shall return one (1) to the Contractor, who shall reproduce whatever additional copies it requires for distribution.
- B. Contractor shall submit six (6) copies of a complete list of all major items of mechanical, plumbing, and electrical equipment and materials in accordance with the approved Submittal Schedule, except as required earlier to comply with the approved Construction Schedule. Other items specified are to be submitted prior to commencing Work. Contractor shall submit items of like kind at one time in a neat and orderly manner. Partial lists will not be acceptable.
- C. Submittals shall include manufacturer's specifications, physical dimensions, and ratings of all equipment. Contractor shall furnish performance curves for all pumps and fans. Where printed literature describes items in addition to that item being submitted, submitted item shall be clearly marked on sheet and superfluous information shall be crossed out. If highlighting is used, Contractor shall mark all copies.
- D. Equipment submittals shall be complete and include space requirements, weight, electrical and mechanical requirements, performance data, and supplemental information that may be requested.
- E. Imported Materials Certification must be submitted at least ten (10) days before material is delivered.

1.05 SAMPLES:

- A. Contractor shall submit for approval Samples as required and within the time frame in the Contract Documents. Materials such as concrete, mortar, etc., which require on-site testing will be obtained from Project Site.

- B. Contractor shall submit four (4) samples except where greater or lesser number is specifically required by Contract Documents including, without limitation, the Specifications.
 - (1) Samples must be of sufficient size and quality to clearly illustrate functional characteristics, with integrally related parts and attachment devices.
 - (2) Samples must show full range of texture, color, and pattern.
- C. Contractor shall make all Submittals, unless it has authorized Subcontractor(s) to submit and Contractor has notified the District in writing to this effect.
- D. Samples to be shipped prepaid or hand-delivered to the District.
- E. Contractor shall mark samples to show name of Project, name of Contractor submitting, Contract number and segment of Work where representative Sample will be used, all applicable Specifications Sections and documents, Contract Drawing Number and detail, and ASTM or FS reference, if applicable.
- F. Contractor shall not deliver any material to Site prior to receipt of District's and/or Architect's completed written review and approval. Contractor shall furnish materials equal in every respect to approved Samples and execute Work in conformance therewith.
- G. District's and/or Architect's review, acceptance, and/or approval of Sample(s) will not preclude rejections of any material upon discovery of defects in same prior to final acceptance of completed Work.
- H. After a material has been approved, no change in brand or make will be permitted.
- I. Contractor shall prepare its Submittal Schedule and submit Samples of materials requiring laboratory tests to specified laboratory for testing not less than ninety (90) days before such materials are required to be used in Work.
- J. Samples which are rejected must be resubmitted promptly after notification of rejection and be marked "Resubmitted Sample" in addition to other information required.
- K. Field Samples and Mock-Ups are to be removed by Contractor at District's direction:
 - (1) Size: As Specified.
 - (2) Furnish catalog numbers and similar data, as requested.

1.06 REVIEW AND RESUBMISSION REQUIREMENTS:

- A. The District will arrange for review of Sample(s), Shop Drawing(s), Product Data, and other submittal(s) by appropriate reviewer and return to Contractor as provided below within twenty-one (21) days after receipt or within twenty-

one (21) days after receipt of all related information necessary for such review, whichever is later.

- B. One (1) copy of product or materials data will be returned to Contractor with the review status.
- C. Samples to be incorporated into the Work will be returned to Contractor, together with a written notice designating the Sample with the appropriate review status and indicating errors discovered on review, if any. Other Samples will not be returned, but the same notice will be given with respect thereto, and that notice shall be considered a return of the Sample.
- D. Contractor shall revise and resubmit any Sample(s), Shop Drawing(s), Product Data, and other submittal(s) as required by the reviewer. Such resubmittals will be reviewed and returned in the same manner as original Sample(s), Shop Drawing(s), Product Data, and other submittal(s), within fourteen (14) days after receipt thereof or within fourteen (14) days after receipt of all related information necessary for such review. Such resubmittal shall not delay the Work.
- E. Contractor may proceed with any of the Work covered by Sample(s), Shop Drawing(s), Product Data, and other submittal(s) upon its return if designated as no exception taken, or revise as noted, provided the Contractor proceeds in accordance with the District and/or the Architect's notes and comments.
- F. Contractor shall not begin any of the work covered by a Sample(s), Shop Drawing(s), Product Data, and other submittal(s), designated as revise and resubmit or rejected, until a revision or correction thereof has been reviewed and returned to Contractor.
- G. Sample(s), Shop Drawing(s), Product Data, and other submittal(s) designated as revise and resubmit or rejected and requiring resubmittal, shall be revised or corrected and resubmitted to the District no later than fourteen (14) days or a shorter period as required to comply with the approved Construction Schedule, after its return to Contractor.
- H. Neither the review nor the lack of review of any Sample(s), Shop Drawing(s), Product Data, and other submittal(s) shall waive any of the requirements of the Contract Documents, or relieve Contractor of any obligation thereunder.
- I. District's and/or Architect's review of Shop Drawings does not relieve the Contractor of responsibility for any errors that may exist. Contractor is responsible for the dimensions and design of adequate connections and details and for satisfactory construction of all the Work.

PART 2 – PRODUCTS Not Used.

PART 3 - EXECUTION Not Used.

END OF DOCUMENT

SITE STANDARDS

PART 1 – GENERAL

1.01 RELATED DOCUMENTS AND PROVISIONS:

All Contract Documents should be reviewed for applicable provisions related to the provisions in this document, including without limitation:

- A. General Conditions, including without limitation, Site Access, Conditions, and Regulations;
- B. Special Conditions;
- C. Drug-Free Workplace Certification;
- D. Tobacco-Free Environment Certification;
- E. Criminal Background Investigation/Fingerprinting Certification;
- F. Temporary Facilities and Controls.

1.02 REQUIREMENTS OF THE DISTRICT:

- A. Drug-Free Schools and Safety Requirements:
 - (1) All school sites and other District Facilities have been declared "Drug-Free Zones." No drugs, alcohol and/or smoking are allowed at any time in any buildings and/or grounds on District property. No students, staff, visitors, or contractors are to use drugs on these sites.
 - (2) Smoking and the use of tobacco products by all persons is prohibited on or in District property. District property includes school buildings, school grounds, school owned vehicles and vehicles owned by others while on District property. Contractor shall post: "Non-Smoking Area" in a highly visible location in each work area, staging area, and parking area. Contractor may designate a smoking area outside of District property within the public right-of-way, provided that this area remains quiet and unobtrusive to adjacent neighbors. This smoking area is to be kept clean at all times.
 - (3) Contractor shall ensure that no alcohol, firearms, weapons, or controlled substances enter or are used at the Site. Contractor shall immediately remove from the Site and terminate the employment of any employee(s) found in violation of this provision.
- B. Language: Profanity or other unacceptable and/or loud language will not be tolerated, "Cat calls" or other derogatory language toward students, staff, volunteers, parents or public will not be allowed.

C. Disturbing the Peace (Noise and Lighting):

- (1) Contractor shall observe the noise ordinance of the Site at all times including, without limitation, all applicable local, city, and/or state laws, ordinances, and/or regulations regarding noise and allowable noise levels.
- (2) The use of radios, etc., shall be controlled to keep all sound at a level that cannot be heard beyond the immediate area of use. District reserves the right to prohibit the use of radios at the Site, except for mobile phones or other handheld communication radios.
- (3) If portable lights are used after dark, all light must be located so as not to direct light into neighboring property.

D. Traffic:

- (1) Driving on the Premises shall be limited to periods when students and public are not present. If driving or deliveries must be made during the school hours, two (2) or more ground guides shall lead the vehicle across the area of travel. In no case shall driving take place across playgrounds or other pedestrian paths during recess, lunch, and/or class period changes. The speed limit on-the Premises shall be five (5) miles per hour (maximum) or less if conditions require.
- (2) All paths of travel for deliveries, including without limitation, material, equipment, and supply deliveries, shall be reviewed and approved by District in advance. Any damage will be repaired to the pre-damaged condition by the Contractor.
- (3) District shall designate a construction entry to the Site. If Contractor requests, District determines it is required, and to the extent possible, District shall designate a staging area so as not to interfere with the normal functioning of school facilities. Location of gates and fencing shall be approved in advance with District and at Contractor's expense.
- (4) Parking areas shall be reviewed and approved by District in advance. No parking is to occur under the drip line of trees or in softscape areas that could otherwise be damaged.

- E. All of the above shall be observed and complied with by the Contractor and all workers on the Site. Failure to follow these directives could result in individual(s) being suspended or removed from the work force at the discretion of the District. The same rules and regulations shall apply equally to delivery personnel, inspectors, consultants, and other visitors to the Site.

PART 2 - PRODUCTS Not Used.

PART 3 - EXECUTION Not Used.

END OF DOCUMENT

REGULATORY REQUIREMENTS

PART 1 - GENERAL

1.01 RELATED DOCUMENTS AND PROVISIONS:

All Contract Documents should be reviewed for applicable provisions related to the provisions in this document, including without limitation:

- A. General Conditions, including, without limitation, Obtaining of Permits and Licenses and Work to Comply with All Applicable Regulations;
- B. Special Conditions; and
- C. Quality Control.

1.02 DESCRIPTION:

This section covers the general requirements for regulatory requirements pertaining to the Work and is supplementary to all other regulatory requirements mentioned or referenced elsewhere in the Contract Documents.

1.03 REQUIREMENTS OF REGULATORY AGENCIES:

- A. All statutes, ordinances, laws, rules, codes, regulations, standards, and the lawful orders of all public authorities having jurisdiction of the Work, are hereby incorporated into these Contract Documents as if repeated in full herein and are intended to be included in any reference to Code or Building Code, unless otherwise specified, including, without limitation, the references in the list below. Contractor shall make available at the Site copies of all the listed documents applicable to the Work as the District and/or Architect may request, including, without limitation, applicable portions of the California Code of Regulations ("CCR").
- B. This Project shall be governed by applicable regulations, including, without limitation, the State of California 's Administrative Regulations for the Division of the State Architect-Structural Safety (DSA/SS), Chapter 4, Part 1, Title 24, CCR, and the most current version on the date the bids are opened and as it pertains to school construction including, without limitation:
 - (1) Test and testing laboratory per Section 4-335 (District shall pay for the testing laboratory.)
 - (2) Special inspections per Section 4-333(c).
 - (3) Verified reports per Section 4-365 & 4-343(c).
 - (4) Duties of the Architect & Engineers shall be per Section 4-333(a) and 4-341.

- (5) Duties of the Contractor shall be per Section 4-343.
- (6) Addenda and Change Orders per Section 4-338.

Contractor shall keep and make available a copy of Part 1 and 2 of the most current version of Title 24 at the Site during construction.

- C. Items of deferred approval shall be clearly marked on the first sheet of the Architect's and/or Engineer's approved Drawings. All items later submitted for approval shall be per Title 24 requirements to the DSA.
 - (1) Building Standards Administrative Code, Part 1, Title 24, CCR
 - (2) California Building Code (CBC), Part 2, Title 24, CCR; (Uniform Building code volumes 1-3 and California Amendments).
 - (3) California Electrical Code (CEC), Part 3, Title 24, CCR; (National Electrical Code and California Amendments).
 - (4) California Mechanical Code (CMC), Part 4, Title 24, CCR; (Uniform Mechanical Code and California Amendments).
 - (5) California Plumbing Code (CPC), Part 5, Title 24, CCR; (Uniform Plumbing Code and California Amendments).
 - (6) California Fire Code (CFC), Part 9, Title 24, CCR; (Fire Plumbing Code and California Amendments).
 - (7) California Referenced Standards Code, Part 12, Title 24, CCR.
 - (8) State Fire Marshal Regulations, Public Safety, Title 19, CCR.
 - (9) Partial List of Applicable NFPA Standards:
 - (a) NFPA 13 - Automatic Sprinkler System.
 - (b) NFPA 14 - Standpipes Systems.
 - (c) NFPA 17A - Wet Chemical System
 - (d) NFPA 24 - Private Fire Mains.
 - (e) (California Amended) NFPA 72 - National Fire Alarm Codes.
 - (f) NFPA 253 - Critical Radiant Flux of Floor Covering System.
 - (g) NFPA 2001 - Clean Agent Fire Extinguishing Systems.
 - (10) California Division of the State Architect interpretation of Regulations.

PART 2 – PRODUCTS Not Used.

PART 3 – EXECUTION Not Used.

END OF DOCUMENT

ABBREVIATIONS AND ACRONYMS

PART 1 – GENERAL

1.01 RELATED DOCUMENTS AND PROVISIONS:

All Contract Documents should be reviewed for applicable provisions related to the provisions in this document, including without limitation:

- A. General Conditions including without limitation, Definitions;
- B. Special Conditions.

1.02 DOCUMENT INCLUDES:

- A. Abbreviations used throughout the Contract Documents.
- B. Reference to a technical society, organization, or body is by abbreviation, as follows:

1.	AA	Aluminum Association
2.	AAMA	Architectural Aluminum Manufacturers Association
3.	AASHTO	American Association of State Highway and Transportation Officials
4.	ABPA	Acoustical and Board Products Association
5.	ACI	American Concrete Institute
6.	AGA	American Gas Association
7.	AGC	Associated General Contractors
8.	AHC	Architectural Hardware Consultant
9.	AI	Asphalt Institute
10.	AIA	American Institute of Architects
11.	AIEE	American Institute of Electrical Engineers
12.	AISC	American Institute of Steel Construction
13.	AISI	American Iron and Steel Institute
14.	AMCA	Air Moving and Conditioning Association
15.	ANSI	American National Standards Institute
16.	APA	American Plywood Association
17.	ARI	Air Conditioning and Refrigeration Institute
18.	ASHRAE	American Society of Heating, Refrigeration and Air Conditioning Engineers
19.	ASME	American Society of Mechanical Engineers
20.	ASSE	American Society of Structural Engineers
21.	ASTM	American Society of Testing and Materials
22.	AWPB	American Wood Preservers Bureau
23.	AWPI	American Wood preservers Institute
24.	AWS	American Welding Society
25.	AWSC	American Welding Society Code
26.	AWI	Architectural Woodwork Institute
27.	AWWA	American Water Works Association
28.	BIA	Brick Institute of America

29.	CCR	California Code of Regulations
30.	CLFMI	Chain Link Fence Manufacturers Institute
31.	CMG	California Masonry Guild
32.	CRA	California Redwood Association
33.	CRSI	Concrete Reinforcing Steel Institute
34.	CS	Commercial Standards
35.	CSI	Construction Specifications Institute
36.	CTI	Cooling Tower Institute
37.	FGMA	Flat Glass Manufacturer's Association
38.	FIA	Factory Insurance Association
39.	FM	Factory Mutual
40.	FS	Federal Specification
41.	FTI	Facing Title Institute
42.	GA	Gypsum Association
43.	ICC	International Code Council
44.	IEEE	Institute of Electrical and Electronic Engineers
45.	IES	Illumination Engineering Society
46.	LIA	Lead Industries Association
47.	MIA	Marble Institute of America
48.	MLMA	Metal Lath Manufacturers Association
49.	MS	Military Specifications
50.	NAAMM	National Association of Architectural Metal Manufacturers
51.	NBHA	National Builders Hardware Association
52.	NBFU	National Board of Fire Underwriters
53.	NBS	National Bureau of Standards
54.	NCMA	National Concrete Masonry Association
55.	NEC	National Electrical Code
56.	NEMA	National Electrical Manufacturers Association
57.	NFPA	National Fire Protection Association/National Forest Products Association
58.	NMWIA	National Mineral Wool Insulation Association
59.	NTMA	National Terrazzo and Mosaic Association
60.	NWMA	National Woodwork Manufacturer's Association
61.	ORS	Office of Regulatory Services (California)
62.	OSHA	Occupational Safety and Health Act
63.	PCI	Precast Concrete Institute
64.	PCA	Portland Cement Association
65.	PDCA	Painting and Decorating Contractors of America
66.	PDI	Plumbing Drainage Institute
67.	PEI	Porcelain Enamel Institute
68.	PG&E	Pacific Gas & Electric Company
69.	PS	Product Standards
70.	SDI	Steel Door Institute; Steel Deck Institute
71.	SJI	Steel Joist Institute
72.	SSPC	Steel Structures Painting Council
73.	TCA	Tile Council of America
74.	TPI	Truss Plate Institute
75.	UBC	Uniform Building Code
76.	UL	Underwriters Laboratories Code
77.	UMC	Uniform Mechanical Code
78.	USDA	United States Department of Agriculture
79.	VI	Vermiculite Institute

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| 80. | WCLA | West Coast Lumberman's Association |
| 81. | WCLB | West Coast Lumber Bureau |
| 82. | WEUSER | Western Electric Utilities Service Engineering Requirements |
| 83. | WIC | Woodwork Institute of California |
| 84. | WPOA | Western Plumbing Officials Association |

PART 2 - PRODUCTS Not Used.

PART 3 - EXECUTION Not Used.

END OF DOCUMENT

DEFINITIONS

PART 1 - GENERAL

1.01 RELATED DOCUMENTS AND PROVISION

All Contract Documents should be reviewed for applicable provisions related to the provisions in this document, including without limitation:

- A. General Conditions including without limitation, Definitions;
- B. Special Conditions.

1.02 QUALITY ASSURANCE:

- A. For products or workmanship specified by association, trade, or Federal Standards, Contractor shall comply with requirements of the standard, except when more rigid requirements are specified in the Contract Documents, or are required by applicable codes.
- B. Contractor shall conform to current reference standard publication date in effect on the date of bid opening.
- C. Contractor shall obtain copies of standards unless specifically required not to by the Contract Documents.
- D. Contractor shall maintain a copy of all standards at jobsite during submittals, planning, and progress of the specific Work, until final completion, unless specifically required not to by the Contract Documents.
- E. Should specified reference standards conflict with Contract Documents, Contractor shall request clarification from the District and./or the Architect before proceeding.
- F. The contractual relationship of the parties to the Contract shall not be altered from the contractual relationship as indicated in the Contract Documents by mention or inference otherwise in any referenced document.
- G. Governing Codes shall be as shown in the Contract Documents including, without limitation, the Specifications.

END OF DOCUMENT

REFERENCES**PART 1 - GENERAL****1.01 1.01 SCHEDULE OF REFERENCES:**

The following information is intended only for the general assistance of the Contractor, and the District does not represent that all of the information is current. It is the Contractor's responsibility to verify the correct information for each of the entities listed.

AA	Aluminum Association 1525 Wilson Blvd., Suite 600 Arlington, VA 22209 www.aluminum.org	703/358-2960
AABC	Associated Air Balance Council 1518 K Street, NW, Suite 503 Washington, DC 20005 www.aabchq.com	202/737-0202
AAMA	American Architectural Manufacturers Association 1827 Walden Office Sq., Suite 550 Schaumburg, IL 60173-4268 www.aamanet.org	847/303-5664
AASHTO	American Association of State Highway and Transportation Officials 444 N Capitol St. NW - Suite 249 Washington, DC 20001 www.transportation.org	202/624-5800
AATCC	American Association of Textile Chemists and Colorists P.O. Box 12215 One Davis Drive Research Triangle Park, NC 27709 2215 www.aatcc.org	919/549-8141
ACA	American Coatings Association 1500 Rhode Island Ave., NW Washington DC, 20005 www.paint.org	202/462-6272

ACI	American Concrete Institute 38800 Country Club Dr. Farmington Hills, MI 48331-3439 www.aci-int.org	248/848-3700
ACPA	American Concrete Pipe Association 8445 Freeport Parkway, Suite 350 Irving, TX 75063-2595 www.concrete-pipe.org	972/506-7216
ADC	Air Diffusion Council 1901 N. Roselle Road, Suite 800 Schaumburg, Illinois 60195 www.flexibleduct.org	847/706-6750
AF&PA	American Forest and Paper Association 1111 Nineteenth Street, NW, Suite 800 Washington, DC 20036 www.afandpa.org	202/463-2700
AGA	American Gas Association 400 North Capitol Street, NW Washington, DC 20001 www.aga.org	202/824-7000
AGC	Associate General Contractors of America 2300 Wilson Blvd., Suite 400 Arlington, VA 22201 www.agc.org	703/548-3118
AHA	American Hardboard Association 1210 West Northwest Highway Palatine, IL 60067 domensino.com/AHA/default.htm	847/934-8800
AI	Asphalt Institute 2696 Research Park Drive Lexington, KY 40511-8480 www.asphaltinstitute.org	859/288-4960
AIA	The American Institute of Architects 1735 New York Ave., NW Washington, DC 20006-5292 www.aia.org	202/626-7300
AISC	American Institute of Steel Construction One East Wacker Drive Suite 700 Chicago, IL 60601-1802 www.aisc.org	312.670.2400

AIA	American Insurance Association (formerly the National Board of Fire Underwriters) 2101 L Street, NW, Suite 400 Washington, DC 20037 www.aiadc.org	202/828-7100
AISI	American Iron and Steel Institute 25 Massachusetts Ave., NW, Suite 800 Washington, DC 20001 www.steel.org	202/452.7100
AITC	American Institute of Timber Construction 7012 S. Revere Parkway Suite 140 Centennial, CO 80112 www.aitc-glulam.org	303/792.9559
ALI	Associated Laboratories, Inc. P.O. Box 152837 Dallas, TX 75315 www.assoc-labs.com	214/565-0593
ALSC	American Lumber Standards Committee, Inc. P.O. Box 210 Germantown, MD 20875 www.alsc.org	301/972-1700
AMCA	Air Movement and Control Association International, Inc. 30 W. University Drive Arlington Heights, IL 60004 www.amca.org	847/394-0150
ANLA	American Nursery & Landscape Association 1200 G Street NW, Suite 800 Washington, DC 20005 www.anla.org	202/789-2900
ANSI	American National Standards Institute 1899 L Street, NW, 11th Floor Washington, DC, 20036 www.ansi.org	202/293.8020
APA	APA-The Engineered Wood Association 7011 S. 19th Street Tacoma, WA 98466-5333 www.apawood.org	253/565-6600

APA	Architectural Precast Association 6710 Winkler Road, Suite 8 Fort Myers, Florida 33919 www.archprecast.org	239/454-6989
ARI	Air Conditioning and Refrigeration Institute 4100 N. Fairfax Drive, Suite 200 Arlington, VA 22203 www.lightindustries.com/ARI	703/524-8800
ARMA	Asphalt Roofing Manufacturers Association Public Information Department 750 National Press Building 529 14th Street, NW Washington, DC 20045 www.asphaltroofing.org	202/591-2450
ASA	The Acoustical Society of America ASA Office Manager Suite 1NO1 2 Huntington Quadrangle Melville, NY 11747-4502 http://asa.aip.org	516/576-2360
ASCE	American Society of Civil Engineers 1801 Alexander Bell Drive Reston, VA 20191 www.asce.org	800/548-2723 703/295-6300
ASHRAE	American Society of Heating, Refrigerating and Air Conditioning Engineers 1791 Tullie Circle, NE Atlanta, GA 30329-2305 www.ashrae.org	800/527-4723 404/636-8400
ASLA	American Society of Landscape Architects 636 Eye Street, NW Washington, DC 20001-3736 www.asla.org	202/898-2444
ASME	American Society of Mechanical Engineers Three Park Avenue New York, NY 10016-5990 www.asme.org	800/434-2763
ASPE	American Society of Plumbing Engineers 2980 S River Rd. Des Plaines, IL 60018 http://aspe.org	847/296-0002

ASQ	American Society for Quality P.O. Box 3005 Milwaukee, WI 53201-3005 or 600 North Plankinton Avenue Milwaukee, WI 53203 http://asq.org	800/248-1946 414/272-8575
ASSE	American Society of Sanitary Engineering 901 Canterbury, Suite A Westlake, Ohio 44145 www.asse-plumbing.org	440/835-3040
ASTM	ASTM International 100 Barr Harbor Drive PO Box C700 West Conshohocken, PA, 19428-2959 www.astm.org	610/832-9500
AWCI	Association of the Wall and Ceiling Industry 513 West Broad Street, Suite 210 Falls Church, VA 22046 www.awci.org	703/538-1600
AWPA	American Wood Protection Association P.O. Box 361784 Birmingham, AL 35236-1784 www.awpa.com	205/733-4077
AWPI	American Wood Preservers Institute 2750 Prosperity Ave. Suite 550 Fairfax, VA 22031-4312 www.arcat.com	800/356-AWPI 703/204-0500
AWS	American Welding Society 8669 Doral Boulevard, Suite 130 Doral, Florida 33166 www.aws.org	800/443-9353 305/443-9353
AWI	Architectural Woodwork Institute 46179 Westlake Drive, Suite 120 Potomac Falls, VA 20165-5874 www.awinet.org	571/323-3636
AWWA	American Water Works Association 6666 West Quincy Avenue Denver, CO 80235 www.awwa.org	800/926-7337 303/794 7711

BHMA	Builders Hardware Manufacturers Association 355 Lexington Avenue, 15th floor New York, NY 10017 www.buildershardware.com	212/297-2122
BIA	The Brick Industry Association 1850 Centennial Park Drive, Suite 301 Reston, VA 20191 www.gobrick.com	703/620-0010
CGA	Compressed Gas Association 14501 George Carter Way, Suite 103 Chantilly VA 20151-2923 www.cganet.com	703/788-2700
CISCA	Ceilings & Interior Systems Construction Association 1010 Jorie Blvd, Suite 30 Oak Brook, IL 60523 www.cisca.org	630/584-1919
CISPI	Cast Iron Soil Pipe Institute 1064 Delaware Avenue SE Atlanta, GA 30316 www.cispi.org	404/622-0073
CLFMI	Chain Link Fence Manufacturers Institute 10015 Old Columbia Road, Suite B-215 Columbia, MD 21046 www.associationsites.com/main-pub.cfm?usr=clfma	410/290-6267
CPA	Composite Panel Association 19465 Deerfield Avenue, Suite 306 Leesburg, VA 20176 www.compositepanel.org	703/724-1128
CPSC	Consumer Product Safety Commission 4330 East West Highway Bethesda, MD 20814 www.cpsc.gov	301/504-7923 800/638-2772
CRA	California Redwood Association 405 Enfrente Drive, Suite 200 Novato, CA 94949 www.calredwood.org	415/382-0662

CRI	Carpet and Rug Institute P.O. Box 2048 Dalton, Georgia 30722-2048 www.carpet-rug.org	706/278-3176
CRSI	Concrete Reinforcing Steel Institute 933 N. Plum Grove Road Schaumburg, IL 60173 4758 www.crsi.org	847/517-1200
CSI	The Construction Specifications Institute 110 South Union Street, Suite 100 Alexandria VA 22314 www.csinet.org	800/689-2900
CTIOA	Ceramic Tile Institute of America 12061 Jefferson Blvd. Culver City, CA 90230-6219 www.ctioa.org	310/574-7800
DHI	Door and Hardware Institute (formerly National Builders Hardware Association) 14150 Newbrook Dr. Chantilly, VA 20151 www.dhi.org	703/222-2010
DIPRA	Ductile Iron Pipe Research Association 2000 2nd Avenue, South Suite 429 Birmingham, AL 35233 www.dipra.org	205/402-8700
DOC	U.S. Department of Commerce 1401 Constitution Ave., NW Washington, D.C. 20230 www.commerce.gov	202/482-2000
DOT	U.S. Department of Transportation 1200 New Jersey Avenue, SE Washington, DC 20590 www.dot.gov	855/368-4200
EJMA	Expansion Joint Manufacturers Association, Inc. 25 North Broadway Tarrytown, NY 10591 www.ejma.org	914/332-0040

EPA	Environmental Protection Agency Ariel Rios Building 1200 Pennsylvania Avenue, N.W. Washington, DC 20460 www.epa.gov	202/272-0167
FCICA	Floor Covering Installation Contractors Association 7439 Millwood Drive West Bloomfield, MI 48322 www.fcica.com	248/661-5015 877/TO-FCICA
FM Global	Factory Mutual Insurance Company Mary Breighner Global Practice Leader Education, Public Entities, Health Care FM Global 9 Woodcrest Court Cincinnati, OH 45246 www.fmglobal.com	513/742-9516
FS	General Services Administration (GSA) Index of Federal Specifications, Standards and Commercial Item Descriptions 470 East L'Enfant Plaza, SW, Suite 8100 Washington, DC 20407 www.gsa.gov	202/619-8925
GA	The Gypsum Association 6525 Belcrest Road, Suite 480 Hyattsville, MD 20782 www.gypsum.org	301/277-8686
GANA	Glass Association of North America 800 SW Jackson St., Suite 1500 Topeka, KS 66612-1200 www.glasswebsite.com	785/271-0208
HMA	Hardwood Manufacturers Association 665 Rodi Road, Suite 305 Pittsburgh, PA 15235 http://hmamembers.org	412/244-0440
HPVA	Hardwood Plywood & Veneer Association 1825 Michael Faraday Drive Reston, Virginia 20190 www.hpva.org	703/435-2900

IAPMO	International Association of Plumbing and Mechanical Officials (formerly the Western Plumbing Officials Association) 4755 E. Philadelphia St. Ontario, CA 91761 www.iapmo.org	909/472-4100
ICC	International Code Council 500 New Jersey Avenue, NW, 6th Floor Washington, DC 20001 www.iccsafe.org	888/422-7233
IEEE	Institute of Electrical and Electronics Engineers 3 Park Avenue, 17th Floor New York, NY 10016-5997 www.ieee.org	212/419-7900
IES	Illuminating Engineering Society 120 Wall Street, Floor 17 New York, NY 10005-4001 www.ies.org	212/248-5000
ITRK	Intertek Testing Services 3933 US Route 11 Cortland, NY 13045 www.intertek.com	607/753-6711
MCAA	Mechanical Contractors Association of America 1385 Piccard Drive Rockville, MD 20850 www.mcaa.org	301/869-5800
MIA	Marble Institute of America 28901 Clemens Rd, Ste 100 Cleveland, OH 44145 www.marble-institute.com	440/250-9222
MMPA (formerly WMMPA)	Moulding & Millwork Producers Association (formerly Wood Moulding & Millwork Producers Association) 507 First Street Woodland, CA 95695 www.wmmpa.com	530/661-9591 800/550-7889

MSS	Manufacturers Standardization Society (MSS) of the Valve and Fittings Industry 127 Park Street, NE Vienna, VA 22180-4602 http://mss-hq.org	703/281-6613
NAAMM	National Association of Architectural Metal Manufacturers 800 Roosevelt Rd. Bldg. C, Suite 312 Glen Ellyn, IL 60137 www.naamm.org	630/942-6591
NAIMA	North American Insulation Manufacturers Association 44 Canal Center Plaza, Suite 310 Alexandria, VA 22314 www.naima.org	703/684-0084
NAPA	National Asphalt Pavement Association 5100 Forbes Blvd. Lanham, MD USA 20706-4407 www.asphaltpavement.org	888/468-6499 301/731-4748
NCSPA	National Corrugated Steel Pipe Association 14070 Proton Road, Suite 100 LB9 Dallas, TX 75244 www.ncspa.org	972/850-1907
NCMA	National Concrete Masonry Association 13750 Sunrise Valley Drive Herndon, VA 20171-4662 www.ncma.org	703/713-1900
NEBB	National Environmental Balancing Bureau 8575 Grovemont Circle Gaithersburg, MD 20877 www.nebb.org	301/977-3698
NECA	National Electrical Contractors Association 3 Bethesda Metro Center, Suite 1100 Bethesda, MD 20814 www.necanet.org	301/657-3110
NEMA	National Electrical Manufacturers Association 1300 North 17th Street, Suite 1752 Rosslyn, Virginia 22209 www.nema.org	703/841-3200

NEII	National Elevator Industry, Inc. 1677 County Route 64 P.O. Box 838 Salem, New York 12865-0838 www.neii.org	518/854-3100
NFPA	National Fire Protection Association 1 Batterymarch Park Quincy, Massachusetts USA 02169-7471 www.nfpa.org	617/770-3000
NHLA	National Hardwood Lumber Association PO Box 34518 Memphis, TN 38184 www.nhla.com	901/377-1818
NIA	National Insulation Association 12100 Sunset Hills Road, Suite 330 Reston, VA 20190 www.insulation.org	703/464-6422
NRCA	National Roofing Contractors Association 10255 W. Higgins Road, Suite 600 Rosemont, IL 60018-5607 www.nrca.net	847/299-9070
NSF	NSF International P.O. Box 130140 789 N. Dixboro Road Ann Arbor, MI 48113-0140, USA www.nsf.org	800/673-6275 734/769-8010
NTMA	National Terrazzo and Mosaic Association PO Box 2605 Fredericksburg, TX 78624 www.ntma.com	800/323-9736
OSHA	Occupational Safety and Health Act U.S. Department of Labor Occupational Safety & Health Administration 200 Constitution Ave., NW Washington, D.C. 20210 www.osha.gov	800/321-OSHA (6742)

PCA	Portland Cement Association 5420 Old Orchard Road Skokie, IL 60077 or 500 New Jersey Ave., N.W. 7 th Floor Washington, D.C. 20001 www.cement.org	847/966-6200 202/408-9494
PCI	Precast/Prestressed Concrete Institute 200 W. Adams St. #2100 Chicago, IL 60606 www.pci.org	312/786-0300
PDCA	Painting and Decorating Contractors of America 2316 Millpark Drive, Ste 220 Maryland Heights, MO 63043 www.pdca.com	800/332-PDCA (7322) 314/514-7322
PDI	Plumbing & Drainage Institute 800 Turnpike Street, Suite 300 North Andover, MA 01845 http://pdionline.org	978/557-0720 800/589-8956
PEI	Porcelain Enamel Institute, Inc. P.O. Box 920220 Norcross, GA 30010 www.porcelainenamel.com	770/676-9366
PG&E	Pacific Gas & Electric Company www.pge.com	800/743-5000
PLANET	Professional Landcare Network 950 Herndon Parkway, Suite 450 Herndon, Virginia 20170 www.landcarenetwork.org	703/736-9666 800/395-2522 703/736-9668
RFCI	Resilient Floor Covering Institute 115 Broad Street, Suite 201 La Grange GA 30240 www.rfci.com	706/882-3833
RIS	Redwood Inspection Service 818 Grayson Road, Suite 201 Pleasant Hill, CA 94523 www.redwoodinspection.com	925/935-1499
SDI	Steel Deck Institute P.O. Box 25 Fox River Grove, IL 60021 www.sdi.org	847/458-4647

SDI	Steel Door Institute 30200 Detroit Road Westlake, Ohio 44145 www.steeldoor.org	440/899-0010
SJI	Steel Joist Institute 234 W. Cheves Street Florence, SC 29501 http://steeljoist.org	843/407-4091
SMA	Stucco Manufacturers Association 500 East Yale Loop Irvine, CA 92614 www.stuccomfgassoc.com	949/387.7611
SMACNA	Sheet Metal and Air Conditioning Contractors' National Association 4201 Lafayette Center Drive Chantilly, Virginia 20151-1219 www.smacna.org	703/803-2980
SPI	SPI: The Plastics Industry Trade Association, Inc. 1667 K St., NW, Suite 1000 Washington, DC 20006 www.plasticsindustry.org	202/974-5200
SSPC	Society for Protective Coatings (formerly the Steel Structures Painting Council) 40 24th St 6th Fl Pittsburgh, PA 15222 www.sspc.org	412/281-2331 877/281-7772
TCA	The Tile Council of North America 100 Clemson Research Blvd. Anderson, SC 29625 www.tcnatile.com	864/646-8453
TPI	Truss Plate Institute 218 North Lee Street, Suite 312 Alexandria, VA 22314 www.tpinst.org	703/683-1010
TPI	Turfgrass Producers International 2 East Main Street East Dundee, IL 60118 www.turfgrasssod.org	800/405-8873 847/649-5555

TCIA	Tree Care Industry Association (formerly the National Arborist Association) 136 Harvey Road, Suite 101 Londonderry, NH 03053 www.tcia.org	800/733-2622
TVI	The Vermiculite Institute c/o The Schundler Company 150 Whitman Avenue Edison, NJ. 08817 www.vermiculiteinstitute.org	732/287-2244
UL	Underwriters Laboratories Inc. 333 Pfingsten Road Northbrook, IL 60062-2096 www.ul.com	847/272-8800 877/854-3577
UNI	Uni-Bell PVC Pipe Association 2711 LBJ Freeway, Suite 1000 Dallas, TX 75234 www.uni-bell.org	972/243-3902
USDA	U.S. Department of Agriculture 1400 Independence Ave., S.W. Washington, DC 20250 www.usda.gov	202/720-2791
WA	Wallcoverings Association 401 North Michigan Avenue Suite 2200 Chicago, IL 60611 www.wallcoverings.org	312/321-5166

WCLIB	West Coast Lumber Inspection Bureau P.O. Box 23145 Portland, OR 97281 or 6980 S.W. Varns Tigard, OR 97223 www.wclib.org	503/639-0651
WCMA	Window Covering Manufacturers Association 355 Lexington Avenue 15th Floor New York, New York 10017 www.wcmanet.org	212/297-2122
WDMA	Window & Door Manufacturers Association 401 N. Michigan Avenue, Suite 2200 Chicago, IL 60611 or 2025 M Street, NW, Ste. 800 Washington, D.C. 20036-3309 www.wdma.com	312/321-6802 202/367-1157
WI	Woodwork Institute P.O. Box 980247 West Sacramento, CA 95798 www.wicnet.org	916/372-9943
WRI	Wire Reinforcement Institute 942 Main Street Hartford, CT 06103 www.wirereinforcementinstitute.org	860/240-9545
WWCA	Western Wall & Ceiling Contractors Association 1910 N. Lime St. Orange, California 92865 www.wwcca.org	714/221-5520
WWPA	Western Wood Products Association 522 SW Fifth Ave., Suite 500 Portland, OR 97204-2122 www2.wwpa.org	503/224-3930

PART 2 - PRODUCTS Not Used.

PART 3 - EXECUTION Not Used.

END OF DOCUMENT

MATERIALS AND EQUIPMENT

PART 1 - GENERAL

1.01 RELATED DOCUMENTS AND PROVISIONS

All Contract Documents should be reviewed for applicable provisions related to the provisions in this document, including without limitation:

- A. General Conditions, including, without limitation, Purchase of Materials and Equipment;
- B. Special Conditions;
- C. Imported Materials Certification.

1.02 MATERIAL AND EQUIPMENT

- A. Only items approved by the District and/or Architect shall be used.
- B. Contractor shall submit lists of products and other product information in accordance with the Contract Documents, including, without limitation, the provisions regarding the submittals.

1.03 MATERIAL AND EQUIPMENT COLORS

- A. The District and/or Architect will provide a schedule of colors.
- B. No individual color selections will be made until after approval of all pertinent materials and equipment and after receipt of appropriate samples in accordance with the Contract Documents, including, without limitation, the provisions regarding the submittals.
- C. Contractor shall request priority in writing for any item requiring advance ordering to maintain the approved Construction Schedule.

1.04 DELIVERY, STORAGE, AND HANDLING

- A. Contractor shall deliver manufactured materials in original packages, containers, or bundles (with seals unbroken), bearing name or identification mark of manufacturer.
- B. Contractor shall deliver fabrications in as large assemblies as practicable; where specified as shop-primed or shop-finished, package or crate as required to preserve such priming or finish intact and free from abrasion.
- C. Contractor shall store materials in such a manner as necessary to properly protect them from damage. Materials or equipment damaged by handling, weather, dirt, or from any other cause will not be accepted.

- D. Materials are not acceptable that have been warehoused for long periods of time, stored or transported in improper environment, improperly packaged, inadequately labeled, poorly protected, excessively shipped, deviated from normal distribution pattern, or reassembled.
- E. Contractor shall store material so as to cause no obstructions of sidewalks, roadways, access to the Site or buildings, and underground services. Contractor shall protect material and equipment furnished under Contract.
- F. Contractor may store materials on Site with prior written approval by the District, all material shall remain under Contractor's control and Contractor shall remain liable for any damage to the materials. Should the Project Site not have storage area available, the Contractor shall provide for off-site storage at a bonded warehouse and with appropriate insurance coverage at no cost to District.
- G. When any room in Project is used as a shop or storeroom, the Contractor shall be responsible for any repairs, patching, or cleaning necessary due to that use. Location of storage space shall be subject to prior written approval by District.

PART 2 - PRODUCTS

2.01 MANUFACTURERS

- A. Manufacturers listed in various sections of Contract Documents are names of those manufacturers that are believed to be capable of supplying one or more of items specified therein.
- B. The listing of a manufacturer does not imply that every product of that manufacturer is acceptable as meeting the requirements of the Contract Documents.

2.02 FACILITIES AND EQUIPMENT

Contractor shall provide, install, maintain, and operate a complete and adequate facility for handling, the execution, disposal, and distribution of material and equipment as required for proper and timely performance of Work connected with Contract.

2.03 MATERIAL REFERENCE STANDARDS

Where material is specified solely by reference to "standard specifications" and if requested by District, Contractor shall submit for review data on actual material proposed to be incorporated into Work of Contract listing name and address of vendor, manufacturer, or producer, and trade or brand names of those materials, and data substantiating compliance with standard specifications.

PART 3 - EXECUTION

3.01 WORKMANSHIP

- A. Where not more specifically described in any other Contract Documents, workmanship shall conform to methods and operations of best standards and accepted practices of trade or trades involved and shall include items of fabrication, construction, or installation regularly furnished or required for completion (including finish and for successful operation, as intended).
- B. Work shall be executed by tradespersons skilled in their respective lines of Work. When completed, parts shall have been durably and substantially built and present a neat appearance.

3.02 COORDINATION

- A. Contractor shall coordinate installation of Work so as to not interfere with installation of others. Adjustment or rework because of Contractor's failure to coordinate will be at no additional cost to District.
- B. Contractor shall examine in-place work for readiness, completeness, fitness to be concealed or to receive other work, and in compliance with Contract Documents. Concealing or covering Work constitutes acceptance of additional cost which will result should in-place Work be found unsuitable for receiving other Work or otherwise deviating from the requirements of the Contract Documents.

3.03 COMPLETENESS

Contractor shall provide all portions of the Work, unless clearly stated otherwise, installed complete and operational with all elements, accessories, anchorages, utility connections, etc., in manner to assure well-balanced performance, in accordance with manufacturer's recommendations and by Contract Documents. For example, electric water coolers require water, electricity, and drain services; roof drains require drain system; sinks fit within countertop, etc. Terms such as "installed complete," "operable condition," "for use intended," "connected to all utilities," "terminate with proper cap," "adequately anchored," "patch and refinish," "to match similar," should be assumed to apply in all cases, except where completeness of functional or operable condition is specifically stated as not required.

3.04 APPROVED INSTALLER OR APPLICATOR

Installation by a manufacturer's approved installer or applicator is an understood part of Specifications and only approved installer or applicator is to provide on-site Work where specified manufacturer has on-going program of approving (i.e. certifying, bonding, re-warranting) installers or applicators. Newly established relationships between a manufacturer and an installer or applicator who does not have other approved applicator work in progress or completed is not approved for this Project.

3.05 MANUFACTURER'S RECOMMENDATIONS

All installations shall be in accordance with manufacturer's published recommendations and specific written directions of manufacturer's representative. Should Contract Documents differ from recommendations of manufacturer or directions of his representative, Contractor shall analyze differences, make recommendations to the District and the Architect in writing, and shall not proceed until interpretation or clarification has been issued by the District and/or the Architect.

END OF DOCUMENT

QUALITY CONTROL

PART 1 - GENERAL

1.01 RELATED DOCUMENTS AND PROVISIONS:

All Contract Documents should be reviewed for applicable provisions related to the provisions in this document, including without limitation:

- A. General Conditions, including, without limitation, Inspector, Inspections and Tests, Uncovering of Work and Non-conforming of Work and Correction of Work;
- B. Special Conditions.

1.02 RELATED CODES:

- A. The Work is governed by requirements of Title 24, California Code of Regulations ("CCR"), and the Contractor shall keep a copy of these available at the job Site for ready reference during construction.
- B. The Division of the State Architect ("DSA") shall be notified at or before the start of construction.

1.03 OBSERVATION AND SUPERVISION:

- A. The District and Architect or their appointed representatives will review the Work and the Contractor shall provide facilities and access to the Work at all times as required to facilitate this review. Administration by the Architect and any consulting Structural Engineer will be in accordance with applicable regulations, including, without limitation, CCR, Part 1, Title 24, Section 4-341.
- B. One or more Project Inspector(s) approved by DSA and employed by or in contract with the District, referred to hereinafter as the "Project Inspector", will observe the work in accordance with CCR, Part 1, Title 24, Sections 4-333(b) and 4-342:
 - (1) The Project Inspector and Special Inspector(s) shall have access to the Work wherever it is in preparation or progress for ascertaining that the Work is in accordance with the Contract Documents and all applicable code sections. The Contractor shall provide facilities and operation of equipment as needed, and access as required and shall provide assistance for sampling or measuring materials.
 - (2) The Project Inspector will notify the District and Architect and call the attention of the Contractor to any observed failure of Work or material to conform to Contract Documents.
 - (3) The Project Inspector shall observe and monitor all testing and inspection activities required.

The Contractor shall conform with all applicable laws as indicated in the Contract Documents, including, without limitation, to CCR, Part 1, Title 24, Section 4-343. The Contractor shall supervise and direct the Work and maintain a competent superintendent on the job who is authorized to act in all matters pertaining to the Work. The Contractor's superintendent shall also inspect all materials, as they arrive, for compliance with the Contract Documents. Contractor shall reject defective Work or materials immediately upon delivery or failure of the Work or material to comply with the Contract Documents. The Contractor shall submit verified reports as indicated in the Contract Documents, including, without limitation, the Specifications and as required by Part 1, Title 24, Section 4-336.

1.04 TESTING AGENCIES:

- A. Testing agencies and tests shall be in conformance with the General Documents and the requirements of Part 1, Title 24, Section 4- 335.
- B. Testing and inspection in connection with earthwork shall be under the direction of the District's consulting soils engineer, if any, referred to hereinafter as the "Soils Engineer."
- C. Testing and inspection of construction materials and workmanship shall be performed by a qualified laboratory, referred to hereinafter as the "Testing Laboratory." The Testing Laboratory shall be under direction of an engineer registered in the State of California, shall conform to requirements of ASTM E329, and shall be employed by or in contract with the District.

1.05 TESTS AND INSPECTIONS:

- A. The Contractor shall be responsible for notifying the District and Project Inspector of all required tests and inspections. Contractor shall notify the District and Project Inspector at least seventy-two hours (72) hours in advance of performing any Work requiring testing or inspection.
- B. The Contractor shall provide access to Work to be tested and furnish incidental labor, equipment, and facilities to facilitate all inspections and tests.
- C. The District will pay for first inspections and tests required by the "CCR", and other inspections or tests that the District and/or the Architect may direct to have made, including the following principal items:
 - (1) Tests and observations for earthwork and paving.
 - (2) Tests for concrete mix designs, including tests of trial batches.
 - (3) Tests and inspections for structural steel work.
 - (4) Field tests for framing lumber moisture content.
 - (5) Additional tests directed by the District that establish that materials and installation comply with the Contract Documents.
 - (6) Test and observation of welding and expansion anchors.

- D. The District may at its discretion, pay and then back charge the Contractor for:
 - (1) Retests or reinspections, if required, and tests or inspections required due to Contractor error or lack of required identifications of material.
 - (2) Uncovering of work in accordance with Contract Documents.
 - (3) Testing done on weekends, holidays, and overtime will be chargeable to the Contractor for the overtime portion.
 - (4) Testing done off Site.
- E. Testing and inspection reports and certifications:
 - (1) If initially received by Contractor, Contractor shall provide to each of the following a copy of the agency or laboratory report of each test or inspection or certification.
 - (a) The District;
 - (b) The Construction Manager, if any;
 - (c) The Architect;
 - (d) The Consulting Engineer, if any;
 - (e) Other engineers on the Project, as appropriate;
 - (f) The Project Inspector; and
 - (g) The Contractor.
 - (2) When the test or inspection is one required by the CCR, a copy of the report shall also be provided to the DSA.

PART 2 - PRODUCTS

2.01 TYPE OF TEST AND INSPECTIONS:

[THE FOLLOWING ARE EXAMPLES ONLY AND SHOULD BE REVISED AFTER CONSULTING WITH ARCHITECT.]

- A. Testing and inspection shall be in accordance with DSA Form 103 (or current version)
- B. Slump Test
ASTM C 143
- C. Concrete Tests

Testing agency shall test concrete used in the work per the following paragraphs:

(1) Compressive Strength:

- (a) Minimum number of tests required: One (1) set of three (3) cylinders for each 100 cubic yards (Sec. 2604(h) 01) of concrete or major fraction thereof, placed in one (1) day. See Title 24, Section 2605(g).
- (b) Two cylinders of each set shall be tested at twenty-eight (28) days. One (1) cylinder shall be held in reserve and tested only when directed by the Architect or District.
- (c) Concrete shall test the minimum ultimate compressive strength in 28 days, as specified on the structural drawings.
- (d) In the event that the twenty-eight (28) day test falls below the minimum specified strength, the effective concrete in place shall be tested by taking cores in accordance with UBC Standard No. 26-13 and tested as required for cylinders.
- (e) In the event that the test on core specimens falls below the minimum specified strength, the concrete will be deemed defective and shall be removed and replaced upon such direction of the Architect, and in a manner acceptable to the Division of the State Architect.

D. Reinforcing, Steel

E. Structural Steel Per Title 24 and as noted:

- (1) Material: Steel per Table in Title 24, Section 2712.
- (2) Qualification of Welders (UBC Std. 27-6).
- (3) Shop fabrication (Section 2712(d). Structural steel only).
- (4) Shop and field welding (Section 2712(e)).

PART 3 - EXECUTION Not Used.

END OF DOCUMENT

TEMPORARY FACILITIES AND CONTROLS

PART 1 – GENERAL

1.01 RELATED DOCUMENTS AND PROVISIONS:

All Contract Documents should be reviewed for applicable provisions related to the provisions in this document, including without limitation:

- A. General Conditions;
- B. Special Conditions;
- C. Site Standards; and
- D. Construction Waste Management and Disposal.

1.02 TEMPORARY UTILITIES:

A. Electric Power and Lighting

- (1) Contractor will pay for power during the course of the Work. To the extent power is available in the building(s) or on the Site, Contractor may use the District's existing utilities by making prearranged payments to the District for the utilities used by Contractor and all Subcontractors. Contractor shall be responsible for providing temporary facilities required to deliver that power service from its existing location in the building(s) or on the Site to point of intended use.
- (2) Contractor shall verify characteristics of power available in building(s) or on the Site. Contractor shall take all actions required to make modifications where power of higher voltage or different phases of current are required. Contractor shall be fully responsible for providing that service and shall pay all costs required therefor.
- (3) Contractor shall furnish, wire for, install, and maintain temporary electrical lights wherever it is necessary to provide illumination for the proper performance and/or observation of the Work: a minimum of 20 foot-candles for rough work and 50 foot-candles for finish work.
- (4) Contractor shall be responsible for maintaining existing lighting levels in the project vicinity should temporary outages or service interruptions occur.

B. Heat and Ventilation

- (1) Contractor shall provide temporary heat to maintain environmental conditions to facilitate progress of the Work, to meet specified minimum conditions for the installation and curing of materials, and to

protect materials and finishes from damage due to improper temperature and humidity conditions. Portable heaters shall be standard units complete with controls.

- (2) Contractor shall provide forced ventilation and dehumidification, as required, of enclosed areas for proper installation and curing of materials, to disperse humidity, and to prevent hazardous accumulations of dust, fumes, vapors, and gases.
- (3) Contractor shall pay the costs of installation, maintenance, operation, and removal of temporary heat and ventilation, including costs for fuel consumed, required for the performance of the Work.

C. Water

- (1) Contractor will pay for water used during the course of the Work. To the extent water is then available in the building(s) or on the Site, Contractor may use the District's existing utilities by making prearranged payments to the District for the utilities used by Contractor and all Subcontractors. Contractor shall be responsible for providing temporary facilities required to deliver such utility service from its existing location in the building(s) or on the Site to point of intended use.
- (2) Contractor shall use backflow preventers on water lines at point of connection to District's water supply. Backflow preventers shall comply with requirements of Uniform Plumbing Code.
- (3) Contractor shall make potable water available for human consumption.

D. Sanitary Facilities

- (1) Contractor shall provide sanitary temporary facilities in no fewer numbers than required by law and such additional facilities as may be directed by the Inspector for the use of all workers. The facilities shall be maintained in a sanitary condition at all times and shall be left at the Site until removal is directed by the Inspector or Contractor completes all other work at the Site.
- (2) Use of toilet facilities in the Work under construction shall not be permitted except by consent of the Inspector and the District.

E. Telephone Service

- (1) Contractor shall arrange with local telephone service company for telephone service as required for the performance of the Work. Contractor shall, at a minimum, provide in its field office one line for telephone and one line for fax machine.
- (2) Contractor shall pay the costs for telephone and fax lines installation, maintenance, service, and removal.

F. Fire Protection:

- (1) Contractor shall provide and maintain fire extinguishers and other equipment for fire protection. Such equipment shall be designated for use for fire protection only and shall comply with all requirements of the California Fire, State Fire Marshall and/or its designee.
- (2) Where on-site welding and burning of steel is unavoidable, Contractor shall provide protection for adjacent surfaces.

G. Trash Removal:

- (1) Contractor shall provide trash removal daily. Under no circumstance shall Contractor use District trash service.

H. Field Office:

- (1) If Contractor chooses to provide a field office, it shall be an acceptable construction trailer that is well-lit and ventilated. The construction trailer shall be equipped with shelves, desks, filing cabinet, chairs, and such other items of equipment needed. Trailer and equipment are the property of the Contractor and must be removed from the Site upon completion of the Work. Contractor may use the corridor adjacent to the construction area for an office area, if approved in writing by District.
- (2) Contractor shall provide any additional electric lighting and power required for the trailer. Contractor shall make adequate provisions for heating and cooling as required.

I. Temporary Facilities:

- (1) Not Applicable

1.03 CONSTRUCTION AIDS:

A. Plant and Equipment:

- (1) Contractor shall furnish, operate, and maintain a complete plant for fabricating, handling, conveying, installing, and erecting materials and equipment; and for conveyances for transporting workmen. Include elevators, hoists, debris chutes, and other equipment, tools, and appliances necessary for performance of the Work.
- (2) Contractor shall maintain plant and equipment in safe and efficient operating condition. Damages due to defective plant and equipment, and uses made thereof, shall be repaired by Contractor at no expense to the District.

B. None of the District's tools and equipment shall be used by Contractor for the performance of the Work.

1.04 BARRIERS AND ENCLOSURES:

- A. Contractor shall obtain the District's written permission for locations and types of temporary barriers and enclosures, including fire-rated materials proposed for use, prior to their installation.
- B. Contractor shall provide and maintain temporary enclosures to prevent public entry and to protect persons using other buildings and portions of the Site and/or Premises, the public, and workers. Contractor shall also protect the Work and existing facilities from the elements, and adjacent construction and improvements, persons, and trees and plants from damage and injury from demolition and construction operations.
- C. Contractor shall provide site access to existing facilities for persons using other buildings and portions of the Site, the public, and for deliveries and other services and activities.
- D. Tree and Plant Protection:
 - (1) Contractor shall preserve and protect existing trees and plants on the Premises that are not designated or required to be removed, and those adjacent to the Premises.
 - (2) Contractor shall provide barriers to a minimum height of 4'-0" around drip line of each tree and plant, around each group of trees and plants, as applicable, in the proximity of demolition and construction operations, or as denoted on the Plans.
 - (3) Contractor shall not park trucks, store materials, perform Work or cross over landscaped areas. Contractor shall not dispose of paint thinners, water from cleaning, plastering or concrete operations, or other deleterious materials in landscaped areas, storm drain systems, or sewers. Plant materials damaged as a result of the performance of the Work shall, at the option of the District and at Contractor's expense, either be replaced with new plant materials equal in size to those damaged or by payment of an amount representing the value of the damaged materials as determined by the District.
 - (4) Contractor shall remove soil that has been contaminated during the performance of the Work by oil, solvents, and other materials which could be harmful to trees and plants, and replace with good soil, at Contractor's expense.
 - (5) Excavation around Trees:
 - (a) Excavation within drip lines of trees shall be done only where absolutely necessary and with written permission from the District.
 - (b) Where trenching for utilities is required within drip lines, tunneling under and around roots shall be by hand digging and shall be approved by the District. Main lateral roots and taproots shall not be cut. All roots 2 inches in diameter and

larger shall be tunneled under and heavily wrapped with wet burlap so as to prevent scarring or excessive drying. Smaller roots that interfere with installation of new work may be cut with prior approval by the District. Roots must first be cut with a Vermeer, or equivalent, root cutter prior to any trenching.

- (c) Where excavation for new construction is required within drip line of trees, hand excavation shall be employed to minimize damage to root system. Roots shall be relocated in backfill areas wherever possible. If encountered immediately adjacent to location of new construction, roots shall be cut approximately 6 inches back from new construction.
- (d) Approved excavations shall be carefully backfilled with the excavated materials approved for backfilling. Backfill shall conform to adjacent grades without dips, sunken areas, humps, or other surface irregularities. Do not use mechanical equipment to compact backfill. Tamp carefully using hand tools, refilling and tamping until Final Acceptance as necessary to offset settlement.
- (e) Exposed roots shall not be allowed to dry out before permanent backfill is placed. Temporary earth cover shall be provided, or roots shall be wrapped with four layers of wet, untreated burlap and temporarily supported and protected from damage until permanently relocated and covered with backfill.
- (f) Accidentally broken roots should be sawed cleanly 3 inches behind ragged end.

1.05 SECURITY:

The Contractor shall be responsible for project security for materials, tools, equipment, supplies, and completed and partially completed Work.

1.06 TEMPORARY CONTROLS:

A. Noise Control

- (1) Contractor acknowledges that adjacent facilities may remain in operation during all or a portion of the Work period, and it shall take all reasonable precautions to minimize noise as required by applicable laws and the Contract Documents.
- (2) Notice of proposed noisy operations, including without limitation, operation of pneumatic demolition tools, concrete saws, and other equipment, shall be submitted to the District a minimum of forty-eight (48) hours in advance of their performance.

B. Noise and Vibration

- (1) Equipment and impact tools shall have intake and exhaust mufflers.

- (2) Contractor shall cooperate with District to minimize and/or cease the use of noisy and vibratory equipment if that equipment becomes objectionable by its longevity.

C. Dust and Dirt

- (1) Contractor shall conduct demolition and construction operations to minimize the generation of dust and dirt, and prevent dust and dirt from interfering with the progress of the Work and from accumulating in the Work and adjacent areas including, without limitation, occupied facilities.
- (2) Contractor shall periodically water exterior demolition and construction areas to minimize the generation of dust and dirt.
- (3) Contractor shall ensure that all hauling equipment and trucks carrying loads of soil and debris shall have their loads sprayed with water or covered with tarpaulins, and as otherwise required by local and state ordinance.
- (4) Contractor shall prevent dust and dirt from accumulating on walks, roadways, parking areas, and planting, and from washing into sewer and storm drain lines.

D. Water

Contractor shall not permit surface and subsurface water, and other liquids, to accumulate in or about the vicinity of the Premises. Should accumulation develop, Contractor shall control the water or other liquid, and suitably dispose of it by means of temporary pumps, piping, drainage lines, troughs, ditches, dams, or other methods.

E. Pollution

- (1) No burning of refuse, debris, or other materials shall be permitted on or in the vicinity of the Premises.
- (2) Contractor shall comply with applicable regulatory requirements and anti-pollution ordinances during the conduct of the Work including, without limitation, demolition, construction, and disposal operations.

F. Lighting

- (1) If portable lights are used after dark, all light must be located so as not to direct light into neighboring property.

1.07 JOB SIGN(S):

A. General:

- (1) Contractor shall provide and maintain a Project identification sign with the design, text, and colors designated by the District and/or the Architect; locate sign as approved by the District.

- (2) Signs other than the specified Project sign and or signs required by law, for safety, or for egress, shall not be permitted, unless otherwise approved in advance by the District.

B. Materials:

- (1) Structure and Framing: Structurally sound, new or used wood or metal; wood shall be nominal 3/4-inch exterior grade plywood.
- (2) Sign Surface: Minimum 3/4-inch exterior grade plywood.
- (3) Rough Hardware: Galvanized.
- (4) Paint: Exterior quality, of type and colors selected by the District and/or the Architect.

C. Fabrication:

- (1) Contractor shall fabricate to provide smooth, even surface for painting.
- (2) Size: 4'-0" x 8'-0", unless otherwise indicated.
- (3) Contractor shall paint exposed surfaces of supports, framing, and surface material with exterior grade paint: one coat of primer and one coat of finish paint.
- (4) Text and Graphics: As indicated.

1.08 PUBLICITY RELEASES:

- A. Contractor shall not release any information, story, photograph, plan, or drawing relating information about the Project to anyone, including press and other public communications medium, including, without limitation, on website(s).

PART 2 – PRODUCTS Not used.

PART 3 – EXECUTION Not used.

END OF DOCUMENT

CONSTRUCTION WASTE MANAGEMENT AND DISPOSAL

PART 1 - GENERAL

1.01 RELATED DOCUMENTS AND PROVISIONS:

All Contract Documents should be reviewed for applicable provisions related to the provisions in this document, including without limitation:

- A. General Conditions;
- B. Special Conditions; and
- C. Temporary Facilities and Controls.
- D. Specification Section 02080.

1.02 SECTION INCLUDES:

- A. Administrative and procedural requirements for the following:
 - (1) Salvaging non-hazardous construction waste.
 - (2) Recycling non-hazardous construction waste.
 - (3) Disposing of non-hazardous construction waste.

1.03 DEFINITIONS:

- A. Construction Waste: Building and site improvement materials and other solid waste resulting from construction, remodeling, renovation, or repair operations. Construction waste includes packaging.
- B. Demolition Waste: Building and site improvement materials resulting from demolition or selective demolition operations.
- C. Disposal: Removal off-site of demolition and construction waste and subsequent sale, recycling, reuse, or deposit in landfill or incinerator acceptable to authorities having jurisdiction.
- D. Recycle: Recovery of demolition or construction waste for subsequent processing in preparation for reuse.
- E. Salvage: Recovery of demolition or construction waste and subsequent sale or reuse in another facility.
- F. Salvage and Reuse: Recovery of demolition or construction waste and subsequent incorporation into the Work.

1.04 PERFORMANCE REQUIREMENTS:

- A. General: Develop waste management plan that results in end-of Project rates for salvage/recycling of fifty percent (50%) by weight (or by volume, but not a combination) of total waste generated by the Work.

1.05 SUBMITTALS:

- A. Waste Management Plan: Submit waste management plan within 30 days of date established for commencement of the Work.
- B. Waste Reduction Progress Reports: Concurrent with each Application for Payment, submit copies of report. Include the following information:
 - (1) Material category.
 - (2) Generation point of waste.
 - (3) Total quantity of waste in tons or cubic yards.
 - (4) Quantity of waste salvaged, both estimated and actual in tons or cubic yards.
 - (5) Quantity of waste recycled, both estimated and actual in tons or cubic yards.
 - (6) Total quantity of waste recovered (salvaged plus recycled) in tons or cubic yards.
 - (7) Total quantity of waste recovered (salvaged plus recycled) as a percentage of total waste.
- C. Waste Reduction Calculations: Before request for final payment, submit copies of calculated end-of-Project rates for salvage, recycling, and disposal as a percentage of total waste generated by the Work.
- D. Records of Donations: Indicate receipt and acceptance of salvageable waste donated to individuals and organizations. Indicate whether organization is tax exempt.
- E. Records of Sales: Indicate receipt and acceptance of salvageable waste sold to individuals and organizations. Indicate whether organization is tax exempt.
- F. Recycling and Processing Facility Records: Indicate receipt and acceptance of recyclable waste by recycling and processing facilities licensed to accept them. Include manifests, weight tickets, receipts, and invoices.
- G. Landfill and Incinerator Disposal Records: Indicate receipt and acceptance of waste by landfills and incinerator facilities licensed to accept them. Include manifests, weight tickets, receipts, and invoices.

- H. [CHPS Submittal: CHPS letter template for Credit ME2.0 and ME2.1, signed by Contractor, tabulating total waste material, quantities diverted and means by which it is diverted, and statement that requirements for the credit have been met.]
- I. Qualification Data: For Waste Management Coordinator.
- J. Statement of Refrigerant Recovery: Signed by refrigerant recovery technician responsible for recovering refrigerant, stating that all refrigerant that was present was recovered and that recovery was performed according to EPA regulations. Include name and address of technician and date refrigerant was recovered.
- K. Submittal procedures and quantities are specified in Document 01 33 00.

1.06 QUALITY ASSURANCE:

- A. Waste Management Coordinator Qualifications: LEED Accredited Professional by U.S. Green Building Council.
- B. Regulatory Requirements: Comply with hauling and disposal regulations of authorities having jurisdiction.
- C. Waste Management Conference: Conduct conference at Project site to comply with requirements. Review methods and procedures related to waste management including, but not limited to, the following:
 - (1) Review and discuss waste management plan including responsibilities of Waste Management Coordinator.
 - (2) Review requirements for documenting quantities of each type of waste and its disposition.
 - (3) Review and finalize procedures for materials separation and verify availability of containers and bins needed to avoid delays.
 - (4) Review procedures for periodic waste collection and transportation to recycling and disposal facilities.
 - (5) Review waste management requirements for each trade.

1.07 WASTE MANAGEMENT PLAN:

- A. General: Develop plan consisting of waste identification, waste reduction work plan, and cost/revenue analysis. Indicate quantities by weight or volume, but use same units of measure throughout waste management plan.
- B. Waste Identification: Indicate anticipated types and quantities of site-clearing and construction waste generated by the Work. Include estimated quantities and assumptions for estimates.

- C. Waste Reduction Work Plan: List each type of waste and whether it will be salvaged, recycled, or disposed of in landfill or incinerator. Include points of waste generation, total quantity of each type of waste, quantity for each means of recovery, and handling and transportation procedures.
- (1) Salvaged Materials for Reuse: For materials that will be salvaged and reused in this Project, describe methods for preparing salvaged materials before incorporation into the Work.
 - (2) Salvaged Materials for Sale: For materials that will be sold to individuals and organizations, include list of their names, addresses, and telephone numbers.
 - (3) Salvaged Materials for Donation: For materials that will be donated to individuals and organizations, include list of their names, addresses, and telephone numbers.
 - (4) Recycled Materials: Include list of local receivers and processors and type of recycled materials each will accept. Include names, addresses, and telephone numbers.
 - (5) Disposed Materials: Indicate how and where materials will be disposed of. Include name, address, and telephone number of each landfill and incinerator facility.
 - (6) Handling and Transportation Procedures: Include method that will be used for separating recyclable waste including sizes of containers, container labeling, and designated location on Project site where materials separation will be located.

PART 2 - PRODUCTS Not Used.

PART 3 - EXECUTION

3.01 PLAN IMPLEMENTATION:

- A. General: Implement approved waste management plan. Provide handling, containers, storage, signage, transportation, and other items as required to implement waste management plan during the entire duration of the Contract.
- (1) Comply with Document 01 50 00 for operation, termination, and removal requirements.
- B. [Waste Management Coordinator: Engage a waste management coordinator to be responsible for implementing, monitoring, and reporting status of waste management work plan. Coordinator shall be present at Project site full time for duration of Project.]
- C. Training: Train workers, subcontractors, and suppliers on proper waste management procedures, as appropriate for the Work occurring at Project site.

- (1) Distribute waste management plan to everyone concerned within 3 days of submittal return.
 - (2) Distribute waste management plan to entities when they first begin work on site. Review plan procedures and locations established for salvage, recycling, and disposal.
- D. Site Access and Temporary Controls: Conduct waste management operations to ensure minimum interference with roads, streets, walks, walkways, and other adjacent occupied and used facilities.
 - (1) Designate and label specific areas of Project site necessary for separating materials that are to be salvaged, recycled, reused, donated, and sold.
 - (2) Comply with Document 01 50 00 for controlling dust and dirt, environmental protection, and noise control.

3.02 RECYCLING CONSTRUCTION WASTE:

- A. General: Recycle paper and beverage containers used by on-site workers.
- B. Recycling Incentives: Revenues, savings, rebates, tax credits, and other incentives received for recycling waste materials shall accrue to the Contractor.
- C. Procedures: Separate recyclable waste from other waste materials, trash, and debris. Separate recyclable waste by type at Project site to the maximum extent practical.
 - (1) Provide appropriately marked containers or bins for controlling recyclable waste until they are removed from Project Site. Include list of acceptable and unacceptable materials at each container and bin.
 - (a) Inspect containers and bins for contamination and remove contaminated materials if found.
 - (2) Stockpile processed materials on site without intermixing with other materials. Place, grade, and shape stockpiles to drain surface water. Cover to prevent windblown dust.
 - (3) Stockpile materials away from construction area. Do not store within drip line of remaining trees.
 - (4) Store components off the ground and protect from the weather.
 - (5) Remove recyclable waste off District property and transport to recycling receiver or processor.

- D. Packaging:
 - (1) Cardboard and Boxes: Break down packaging into flat sheets. Bundle and store in a dry location.
 - (2) Polystyrene Packaging: Separate and bag material.
 - (3) Pallets: As much as possible, require deliveries using pallets to remove pallets from Project Site. For pallets that remain on Site, break down pallets into component wood pieces and comply with requirements for recycling wood.
 - (4) Crates: Break down crates into component wood pieces and comply with requirements for recycling wood.
- E. Site-Clearing Wastes: Chip brush, branches, and trees on site.
- F. Wood Materials:
 - (1) Clean Cut-Offs of Lumber: Grind or chip into small pieces.
 - (2) Clean Sawdust: Bag sawdust that does not contain painted or treated wood.
- G. Gypsum Board: Stack large clean pieces on wood pallets and store in a dry location.
 - (1) Clean Gypsum Board: Grind scraps of clean gypsum board using small mobile chipper or hammer mill. Screen out paper after grinding.

3.03 DISPOSAL OF WASTE:

- A. General: Except for items or materials to be salvaged, recycled, or otherwise reused, remove waste materials from Project Site and legally dispose of them in a landfill or incinerator acceptable to authorities having jurisdiction.
 - (1) Except as otherwise specified, do not allow waste materials that are to be disposed of accumulate on site.
 - (2) Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.
- B. Burning: Do not burn waste materials.
- C. Disposal: Transport waste materials off District property and legally dispose of them.

END OF SECTION

FIELD OFFICES
NOT IN CONTRACT

PART 1 – GENERAL

1.01 RELATED DOCUMENTS AND PROVISIONS:

All Contract Documents should be reviewed for applicable provisions related to the provisions in this document, including without limitation:

- A. General Conditions;
- B. Special Conditions; and
- C. Temporary Facilities and Controls.

1.02 SECTION INCLUDES:

- A. Requirements for Field Offices and Field Office Trailers.

1.03 SUMMARY:

- A. General: Contractor shall provide District's Field Office Trailer and contents, for District's use exclusively, during the term of the Contract.
- B. Property: Trailer, furniture, furnishings, equipment, and the like, supplied by the Contractor with the Office Trailer shall remain the property of the Contractor; District property items installed, delivered, and the like by District within the Office Trailer will remain District's property.
- C. Modifications: District reserves the right to modify the trailer or contents, or both, as may be deemed proper by District.
- D. Condition: Trailer and contents shall be clean, neat, substantially finished, in good, proper, and safe condition for use, operation, and the like; the trailer and contents shall not be required to be new.
- E. Installation Timing: Provide safe, fully furnished, functional, proper, complete, and finished trailer properly ready for entire use, within fourteen (14) calendar days of District's notification of the issuance of Notice to Proceed.

1.04 SUBMITTALS:

- A. General: Submit submittals to District in quantity, format, type, and the like, as specified herein.
- B. Office Trailer Data: One (1) copy of manufacturer's descriptive data, technical descriptions, regulatory compliance, industry standards, installation, removal, and maintenance instructions.

- C. Equipment Data: Two (2) copies of manufacturer data for each type of equipment, if directed by District.
- D. Furniture and Furnishings Data: Two (2) copies of manufacturer data for each type of equipment, if directed by District.
- E. Plans: One (1) reproducible copy of appropriately scaled plans of trailer layout. Plans shall include, but not be limited to: lighting; furniture; equipment; telephone and electrical outlets; and the like.
- F. Product Samples: One (1) complete and entire unit of each type, if directed by District.

1.05 QUALITY ASSURANCE

- A. Standards: In the event that provisions of codes, regulations, safety orders, Contract Documents, referenced manufacturer's specifications, manufacturer's instructions, industry standards, and the like, are in conflict, the more restrictive and higher quality shall govern.
- B. Installer: Installer or Installers engaged by Contractor must have a minimum of five (5) years of documented and properly authenticated successful experience of specialization in the installation of the items or systems, or both, specified herein.
- C. Manufacturer: Contractor shall obtain products from nationally and industry recognized Manufacturer with five (5) years minimum, of immediately recent, continuous, documented and properly authenticated successful experience of specialization in the manufacture of the product specified herein.
- D. State Personnel Training: Provide proper training for maintenance and operations, including emergency procedures, and the like, as directed by District.
- E. Units: Shall be sound and free of defects, and shall not include any damage or defect that will impair the safety, installation, performance, or the durability of the entire Office Trailer and appurtenant systems.

1.06 REGULATORY REQUIREMENTS

- A. General: Work shall be executed in accordance with applicable Codes, Regulations, Statutes, Enactment's, Rulings, Laws, each authority having jurisdiction, and including, but not limited to, Regulatory Requirements specified herein.
- B. California Building Standards Code ("CBSC").
- C. California Code of Regulations, Title 25, Chapter 3, Sub Chapter 2, Article 3 ("CCR").
- D. Coach Insignia: Trailer shall display California Commercial Coach Insignia; such insignia shall be deemed to show that the trailer is in accordance with the Construction and Fire Safety requirements of CCR.

PART 2 – PRODUCTS

2.01 FIELD OFFICE TRAILER

- A. General: Provide entire Field Office Trailer of type, function, operation, capacity, size, complete with controls, safety devices, accessories, and the like, for proper and durable installation. Partitions, walls, ceiling, and other interior and exterior surfaces shall be appropriately finished, including, but not limited to, trim, painting, wall base, floor covering, suspended or similar ceiling, and the like; provide systems, components, units, nuts, bolts, screws, anchoring devices, fastening devices, washers, accessories, adhesives, sealants, and other items of type, grade, and class required for the particular use, not identified but required for a complete, weather-tight, appropriately operating, and finished installation.
- B. Manufacturers: General Electric Capital Modular Space; The Space Place, Inc.; or equal.
- C. Program: Provide a wheel-mounted trailer with stairs, landings, platforms, ramps, stairs, platforms, and the like, in good, proper, safe, clean, and properly finished condition; with proper heavy duty locks, and other proper and effective security at all doors, windows, and the like. Trailer shall be maintained in good, proper, safe, clean, and properly finished condition during the Contract.
 - (1) Nominal Trailer Size: Four hundred eighty (480) square feet, minimum.
 - (2) Stairs, Platform: Properly finished stairs, platforms, and ramps.
 - (3) Doors: Two (2), three (3) foot wide exterior doors with locksets; finished ramp, steps, and entry platform at each exterior door.
 - (4) Keys: Submit five (5) keys for each door, window, furniture unit, and the like, there shall be no other key copies or originals available; each key shall be identified for District; and shall be labeled, or tagged or both, as directed by District.
 - (5) HVAC: **[PROVIDE DESCRIPTION OR DELETE]**
 - (6) Lighting: Sixty-five (65) foot-candles illumination minimum at any point, at thirty (30) inches above finished floor throughout from fluorescent light source, exclusively, or as directed by District.
 - (7) Electrical Outlets: One (1) duplex outlet evenly spaced every twelve (12) linear horizontal feet of wall face, and electrical service ready for use.
 - (8) Telephones and Telephone Outlets: Two (2) telephone lines wired, connected to telephone utility service, and ready for use, and two (2) telephone instruments, each with two (2)-line capability, speed dial and hands-free feature. Locate each outlet as directed by District.

- (9) Answering Machine: One (1) unit, two (2)-line; digital.

2.02 FIELD OFFICE TRAILER ITEMS

- A. General: Provide the Field Office Trailer with the following arranged into two (2) workstations:
- (1) Desks: Two (2) desks: thirty-six (36) inches by sixty (60) inches; steel, laminated plastic top; locking, one (1) or two (2) file drawers single pedestal; steel; provide five (5) keys to District.
 - (2) Tables: Two (2) tables; thirty-six (36) inches by sixty (60) inches; twenty-nine (29) inches high; steel, laminated plastic top tables; one (1) at each desk.
 - (3) Chairs: Two (2) chairs: swivel; steel; with seat cushion and arms; one (1) at each desk.
 - (4) Waste Baskets: Two (2) waste baskets, one at each desk.
 - (5) Recycle Baskets: Two (2) recycle baskets, one at each desk.
- B. Furniture and Equipment: Provide in the space located to effect efficient and logical use.
- (1) File cabinet: One (1); four (4) drawer; lateral; steel locking.
 - (2) Plan Table: One (1) plan table: thirty-six (36) inches deep by seventy-two (72) inches wide by forty-two (42) inches high; adjustable; wood or steel; with lockable plan and pencil drawers.
 - (3) Drafting Stool: One (1) drafting stool; swiveling; steel; padded; adjustable; with footrest and casters.
 - (4) Bookshelf: One (1) bookshelf: thirty-six (36) inches deep by seventy-two (72) inches wide by forty-two (42) inches high; adjustable; wood or steel; with lockable plan and pencil drawer.
 - (5) Plan Rack: One (1) wheel mounted plan rack.
 - (6) Waste Baskets: One (1) large waste basket.
 - (7) Coat/Hat Hanger: Wall mounted with minimum capacity for four (4) garments and ten (10) hats.
 - (8) Document Management System: Shall include an integrated high-volume black and white as well as color printer, scanner, copier, and facsimile machine, including stand, base, and storage cabinet; and shall include the following features:
 - (a) Type: Laser, dry electrostatic transfer, plain paper, digital, multi-function imaging system.

- (b) Network: Ethernet or Token Ring network ready, Plug-and-Play.
- (c) Print, send/receive facsimile from any connected workstation.
- (d) Resolution: Six hundred (600) dots per inch by six hundred (600) dots per inch, minimum.
- (e) Print Speed: Twenty (20) pages per minute, minimum.
- (f) Copies: Twenty (20) copies per minute, minimum.
- (g) Document Handler: Forty (40) sheet, minimum
- (h) Collator: Forty (40) bin, minimum, with stapling.
- (i) Duplexing: Capable.
- (j) Paper Size: Capable of handling paper sizes to eleven (11) inches by seventeen (17) inches.
- (k) Paper Cassettes: One (1) each for eight and one half (8.5) inches by eleven (11) inches, eight and one half (8.5) inches by fourteen (14) inches, and eleven (11) inches by seventeen (17) inches paper sizes; minimum two hundred fifty (250) sheets per cassette.
- (l) Reduction/Enlargement: Capable of reduction to twenty-five percent (25%) and enlargement to two hundred percent (200%).
- (m) Facsimile Electronic Storage: Capable of storing minimum of fifty (50) speed dial numbers, group faxing and broadcast faxing.
- (n) Facsimile Scanning: Capable of scanning into memory a minimum of one hundred (100) pages with maximum scan time of three (3) seconds per page.
- (o) Halftone: Sixty-four (64) levels.
- (p) Redial: Automatic and Manual.
- (9) Maintenance: Contractor shall purchase service agreements for each unit of equipment for the duration of the project plus two (2) months, and shall maintain all equipment in proper working condition. Service agreements shall include provision for replacement of toner cartridges and other items required to effect proper unit use. Service agreements shall also provide for:
 - (a) Unlimited Service Calls.
 - (b) Same Day Response.

- (c) All parts, labor, preventative maintenance and mileage.
 - (d) All chemicals, such as toner, fixing agent, and the like.
 - (e) System training and setup.
- (10) Portable Toilets: Two (2); each shall include a urinal; each unit shall be a properly enclosed chemical unit conforming to ANSI Z4.3.
- (a) Location: As directed by District.
 - (b) Maintenance: Maintain each unit and surrounding areas in a clean, hygienic and orderly manner, at all time. Empty, clean, and sanitize each unit each day at a location and time as directed by District.
 - (c) Removal: Relocate, or remove from the site, each Portable Toilet. Upon such directive by District, the Contractor shall forthwith relocate or remove each Portable Toilet and submit the affected areas to a condition which existed prior to the installation of each Portable Toilet, within three (3) calendar days, or as directed by District in writing, at no cost to District.

2.03 UTILITY AND SERVICES

- A. Telephone Service: Contractor shall provide and interface the entire telephone service, and shall properly and timely pay for telephone service for District's non-long-distance use.
- B. Electrical Service: Provide all proper connections and continuously pay for service for the duration of the Work.

2.04 FINISHES

- A. General: Manufacturer standard finish system over surfaces properly cleaned, pretreated, and prepared to obtain proper bond; all visible surfaces shall be coated.
- B. Finish: Color as selected by District from manufacturer standard palette.

PART 3 – EXECUTION

3.01 INSTALLATION

- A. General: Properly prepare area and affected items to receive the Work. Set Work accurately in location, alignment, and elevation; rigidly, securely, and firmly anchor to appropriate structure; install plumb, straight, square, level, true, without racking, rigidly anchored to proper solid blocking, substrate, and the like; provide appropriate type and quantity of reinforcements, fasteners, adhesives, self-adhesive and other tapes; lubricants, coatings, accessories, and the like, as required for a complete, structurally rigid, stable, sound, and appropriately finished installation, in accordance with manufacturer's published instructions, and as indicated. The more restrictive and higher

quality requirement shall govern. Moving parts shall be properly secured, without binding, looseness, noise, and the like.

- B. Installation: Install in accordance with 25 CCR 3.2.3 and as directed by District; jack up trailer and level both ways; mount on proper concrete piers with all load off wheels; provide required tie down and accessories per Section 4368 of referenced CCR, and as directed by District.
- C. Rejected Work: Work, materials, unit, items, systems, and the like, not accepted by District shall be deemed rejected, and shall forthwith be removed and replaced with proper and new Work, materials, unit, items, systems, and the like at no cost to District.
- D. Standard: Comply with manufacturer's published instructions, or with instructions as shown or indicated; the more restrictive and higher quality requirement shall govern.
- E. Location: As directed by District.
- F. Fire Resistance: Construct and install in accordance with UL requirements.
- G. Maintenance: Contractor shall maintain trailer and adjacent areas in a safe, clean and hygienic condition throughout the duration of the Work, and as directed by District. Properly repair or replace furniture or other items, as directed by District. Properly remove unsafe, damaged, or broken furniture, or similar items, and replace with safe and proper items. Contractor shall pay cost of all services, repair, and maintenance, or replacement of each item.
- H. Janitorial Service: Provide professional janitorial services, including, but not limited to, trash, waste paper baskets, fill paper dispensers; clean and dust all furniture, files, and the like; sweep and mop resilient and similar flooring; and vacuum carpeting and similar flooring.
 - (1) Frequency: Two (2) times per week, minimum.
- I. Removal: Properly remove the Office Trailer and contents from the Site upon completion of the Contract, or as directed by District in writing. Forthwith properly patch and repair affected areas; replace damaged items with new items. Carefully and properly inventory, clean, pack, store, and protect District property; submit District property to District at a date, time and location as directed by District.

END OF DOCUMENT

OWNER-FURNISHED PRODUCTS
NOT IN CONTRACT

PART 1 – GENERAL

1.01 RELATED DOCUMENTS AND PROVISIONS:

All Contract Documents should be reviewed for applicable provisions related to the provisions in this document, including without limitation:

- A. General Conditions;
- B. Special Conditions; and
- C. Materials and Equipment.

1.02 SECTION INCLUDES:

- A. Requirements for the following:
 - (1) Installing Owner-furnished materials and equipment.
 - (2) Providing necessary utilities, connections and rough-ins.

1.03 DEFINITIONS

- A. Owner: District, who is providing/furnishing materials and equipment.
- B. Installing Contactor or Installer/Contractor: Contractor, who is installing the materials and equipment furnished by the Owner.

1.04 PRODUCT DELIVERY, STORAGE, AND HANDLING:

- A. Receive, store and handle products in accordance with the manufacturer's instructions.
- B. Protect equipment items as required to prevent damage during storage and construction.

PART 2 – PRODUCTS

2.01 GENERAL PRODUCT REQUIREMENTS:

- A. Installer Contractor's Responsibilities:
 - (1) Verify mounting and utility requirements for Owner-furnished materials and equipment items.
 - (2) Provide mounting and utility rough in for all items where required.
 - (a) Rough in locations, sizes, capacities, and similar type items shall be as indicated and required by product manufacturer.

B. Owner and Installer Contractor(s) Responsibilities:

- (1) Owner-Furnished/Contractor Installed ("OFCI"): Furnished by the Owner; installed by the Installer Contractor.
 - (a) General: Owner and Installer Contractor(s) will coordinate deliveries of materials and equipment to coincide with the construction schedule.
 - (b) Owner will furnish specified materials and equipment delivered to the site. Owner/vendor's representative shall be present on Site at the time of delivery to comply with the contract requirements and Specifications Section 01 43 00, Materials and Equipment, Article 1.04.
 - (c) The Owner furnishing specified materials and equipment is responsible to provide manufacturer guarantees as required by the Contract to the Installer Contractor.
 - (d) The Installer Contractor shall:
 - 1) Review, verify and accept the approved manufacturer's submittal/Shop Drawings for all materials and equipment required to be installed by the Installer Contractor and furnished by the Owner. Any discrepancies, including but not limited to possible space conflicts, should be brought to the attention of the Project Manager and/or Program Manager, if applicable.
 - 2) Coordinate timely delivery. Installer Contractor shall receive materials and equipment at Site when delivered and give written receipt at time of delivery, noting visible defects or omissions; if such declaration is not given, the Installer Contractor shall assume responsibility for such defects and omissions.
 - 3) Store materials and equipment until ready for installation and protect from loss and damage. Installer Contractor is responsible for providing adequate storage space.
 - 4) Coordinate with other bid package contractors and field measurement to ensure complete installation.
 - 5) Uncrate, assemble, and set in place.
 - 6) Provide adequate supports.
 - 7) Install materials and equipment in accordance with manufacturer's recommendations, instructions, and Shop Drawings, supply labor and material required, and make mechanical, plumbing, and electrical connections required to operate equipment.

- 8) Be certified by equipment manufacturer for installation of the specific equipment supplied by the Owner.
- 9) Provide anchorage and/or bracing as required for seismic restraint per Title 24, UBC Standard 27-11 and all other applicable codes.
- 10) Provide the contract-required warranty and guarantee for all work, materials and equipment, and installation upon its completion and acceptance by the District. Guarantee includes all costs associated with the removal, shipping to and from the Site, and re-installation of any equipment found to be defective.

C. Compatibility with Space and Service Requirements:

- (1) Equipment items shall be compatible with space limitations indicated and as shown on the Contract Documents and specified in other sections of the Specifications.
- (2) Modifications to equipment items required to conform to space limitations specified for rough in shall not cause additional cost to the District.

D. Manufacturer's printed descriptions, specifications, and instructions shall govern the Work unless specifically indicated or specified otherwise.

2.02 FURNISHED MATERIALS AND EQUIPMENT

- A. All furnished materials and equipment are indicated or scheduled on the Contract Documents.

PART 3 – EXECUTION

3.01 INSTALLATION

- A. Install equipment items in accordance with the manufacturer's instructions.
- B. Set equipment items securely in place, rigidly or flexibly mounted in accordance with manufacturers' directions.
- C. Make electrical and mechanical connections as indicated and required.
- D. Touch-up and restore damaged or defaced finishes to the District's satisfaction.

3.02 CLEANING AND PROTECTION

- A. Repair or replace items not acceptable to the Architect or District.
- B. Upon completion of installation, clean equipment items in accordance with manufacturer's recommendations, and protect from damage until final acceptance of the Work by the District.

END OF DOCUMENT

SECTION 01 66 00

PRODUCT DELIVERY, STORAGE AND HANDLING

PART 1 - GENERAL

1.01 RELATED DOCUMENTS AND PROVISIONS

All Contract Documents should be reviewed for applicable provisions related to the provisions in this document, including without limitation:

- A. General Conditions, including, without limitation, Site Access, Conditions and Requirements;
- B. Special Conditions.

1.02 PRODUCTS

- A. Products are as defined in the General Conditions.
- B. Contractor shall not use and/or reuse materials and/or equipment removed from existing Premises, except as specifically permitted by the Contract Documents.
- C. Contractor shall provide interchangeable components of the same manufacturer, for similar components.

1.03 TRANSPORTATION AND HANDLING

- A. Contractor shall transport and handle Products in accordance with manufacturer's instructions.
- B. Contractor shall promptly inspect shipments to confirm that Products comply with requirements, quantities are correct, and products are undamaged.
- C. Contractor shall provide equipment and personnel to handle Products by methods to prevent soiling, disfigurement, or damage.

1.04 STORAGE AND PROTECTION

- A. Contractor shall store and protect Products in accordance with manufacturer's instructions, with seals and labels intact and legible. Contractor shall store sensitive products in weather-tight, climate controlled enclosures.
- B. For exterior storage of fabricated Products, Contractor shall place on sloped supports, above ground.
- C. Contractor shall provide off-site storage and protection when Site does not permit on-site storage or protection.

- D. Contractor shall cover products subject to deterioration with impervious sheet covering and provide ventilation to avoid condensation.
- E. Contractor shall store loose granular materials on solid flat surfaces in a well-drained area and prevent mixing with foreign matter.
- F. Contractor shall provide equipment and personnel to store Products by methods to prevent soiling, disfigurement, or damage.
- G. Contractor shall arrange storage of Products to permit access for inspection and periodically inspect to assure Products are undamaged and are maintained under specified conditions.
- H. Contractor shall store all products and equipment used under this contract in double locked storage container(s). Containers shall be vandal proof. If unable to provide a vandal proof container Contractor shall remove products and equipment from the site at the end of each work day.

PART 2 – PRODUCTS Not Used.

PART 3 - EXECUTION Not Used.

END OF DOCUMENT

FIELD ENGINEERING

PART 1 - GENERAL

1.01 RELATED DOCUMENTS AND PROVISIONS:

All Contract Documents should be reviewed for applicable provisions related to the provisions in this document, including without limitation:

- A. General Conditions, including, without limitation, Site Investigation, and Soils Investigation Report;
- B. Special Conditions;
- C. Site-Visit Certification.

1.02 REQUIREMENTS INCLUDED:

- A. Contractor shall provide and pay for field engineering services by a California-registered engineer, required for the project, including, without limitations:
 - (1) Survey work required in execution of the Project.
 - (2) Civil or other professional engineering services specified, or required to execute Contractor's construction methods.

1.03 QUALIFICATIONS OF SURVEYOR OR ENGINEERS:

Contractor shall only use a qualified licensed engineer or registered land surveyor, to whom District makes no objection.

1.04 SURVEY REFERENCE POINTS:

- A. Existing basic horizontal and vertical control points for the Project are those designated on the Drawings.
- B. Contractor shall locate and protect control points prior to starting Site Work and preserve all permanent reference points during construction. In addition Contractor shall:
 - (1) Make no changes or relocation without prior written notice to District and Architect.
 - (2) Report to District and Architect when any reference point is lost or destroyed, or requires relocation because of necessary changes in grades or locations.
 - (3) Require surveyor to replace Project control points based on original survey control that may be lost or destroyed.

1.05 RECORDS:

Contractor shall maintain a complete, accurate log of all control and survey work as it progresses.

1.06 SUBMITTALS:

- A. Contractor shall submit name and address of Surveyor and Professional Engineer to District and Architect prior to its/their work on the Project.
- B. On request of District and Architect, Contractor shall submit documentation to verify accuracy of field engineering work, at no additional cost to the District.
- C. Contractor shall submit a certificate signed by registered engineer or surveyor certifying that elevations and locations of improvements are in conformance or nonconformance with Contract Documents.

PART 2 – PRODUCTS Not Used.

PART 3 - EXECUTION

3.01 COMPLIANCE WITH LAWS:

Contractor is responsible for meeting all applicable codes, OSHA, safety and shoring requirements.

3.02 NONCONFORMING WORK:

Contractor is responsible for any re-surveying required by correction of nonconforming work.

END OF DOCUMENT

CUTTING AND PATCHING

PART 1 – GENERAL

1.01 RELATED DOCUMENTS AND PROVISIONS:

All Contract Documents should be reviewed for applicable provisions related to the provisions in this document, including without limitation:

- A. General Conditions, including, without limitation, Inspector, Inspections, and Tests, Integration of Work, Nonconforming Work, and Correction of Work, and Uncovering Work;
- B. Special Conditions;
- C. Hazardous Materials Procedures and Requirements;
- D. Hazardous Materials Certification;
- E. Lead-Based Paint Certification;
- F. Imported Materials Certification.

1.02 CUTTING AND PATCHING:

- A. Contractor shall be responsible for all cutting, fitting, and patching, including associated excavation and backfill, required to complete the Work or to:
 - (1) Make several parts fit together properly.
 - (2) Uncover portions of Work to provide for installation of ill-timed Work.
 - (3) Remove and replace defective Work.
 - (4) Remove and replace Work not conforming to requirements of Contract Documents.
 - (5) Remove Samples of installed Work as specified for testing.
 - (6) Provide routine penetrations of non-structural surfaces for installation of piping and electrical conduit.
 - (7) Attaching new materials to existing remodeling areas – including painting (or other finishes) to match existing conditions.
- B. In addition to Contract requirements, upon written instructions from the District, Contractor shall uncover Work to provide for observations of covered Work in accordance with the Contract Documents; remove samples of installed materials for testing as directed by District; and remove Work to provide for alteration of existing Work.

- C. Contractor shall not cut or alter Work, or any part of it, in such a way that endangers or compromises the integrity of the Work, the Project, or work of others.

1.03 SUBMITTALS:

- A. Prior to any cutting or alterations that may affect the structural safety of Project, or work of others, and well in advance of executing such cutting or alterations, Contractor shall submit written notice to District pursuant to the applicable notice provisions of the Contract Documents, requesting consent to proceed with the cutting or alteration, including the following:
 - (1) The work of the District or other trades.
 - (2) Structural value or integrity of any element of Project.
 - (3) Integrity or effectiveness of weather-exposed or weather-resistant elements or systems.
 - (4) Efficiency, operational life, maintenance or safety of operational elements.
 - (5) Visual qualities of sight-exposed elements.
- B. Contractor's Request shall also include:
 - (1) Identification of Project.
 - (2) Description of affected Work.
 - (3) Necessity for cutting, alteration, or excavations.
 - (4) Affects of Work on District, other trades, or structural or weatherproof integrity of Project.
 - (5) Description of proposed Work:
 - (a) Scope of cutting, patching, alteration, or excavation.
 - (b) Trades that will execute Work.
 - (c) Products proposed to be used.
 - (d) Extent of refinishing to be done.
 - (6) Alternates to cutting and patching.
 - (7) Cost proposal, when applicable.
 - (8) The scheduled date the Contractor intends to perform the Work and the duration of time to complete the Work.

- (9) Written permission of District or other District contractor(s) whose work will be affected.

1.04 QUALITY ASSURANCE:

- A. Contractor shall ensure that cutting, fitting, and patching shall achieve security, strength, weather protection, appearance for aesthetic match, efficiency, operational life, maintenance, safety of operational elements, and the continuity of existing fire ratings.
- B. Contractor shall ensure that cutting, fitting, and patching shall successfully duplicate undisturbed adjacent profiles, materials, textures, finishes, colors, and that materials shall match existing construction. Where there is dispute as to whether duplication is successful or has been achieved to a reasonable degree, the District's decision shall be final.

1.05 PAYMENT FOR COSTS:

- A. Cost caused by ill-timed or defective Work or Work not conforming to Contract Documents, including costs for additional services of the District, its consultants, including but not limited to the Construction Manager, the Architect, the Project Inspector(s), Engineers, and Agents, will be paid by Contractor and/or deducted from the Contract by the District.
- B. District shall only pay for cost of Work if it is part of the original Contract Price or if a change has been made to the contract in compliance with the provisions of the General Conditions. Cost of Work performed upon instructions from the District, other than defective or nonconforming Work, will be paid by District on approval of written Change Order. Contractor shall provide written cost proposals prior to proceeding with cutting and patching.

PART 2 - PRODUCTS

2.01 MATERIALS:

- A. Contractor shall provide for replacement and restoration of Work removed. Contractor shall comply with the Contract Documents and with the Industry Standard(s), for the type of Work, and the Specification requirements for each specific product involved. If not specified, Contractor shall first recommend a product of a manufacturer or appropriate trade association for approval by the District.
- B. Materials to be cut and patched include those damaged by the performance of the Work.

PART 3 – EXECUTION

3.01 INSPECTION:

- A. Contractor shall inspect existing conditions of the Site and the Work, including elements subject to movement or damage during cutting and patching, excavating and backfilling. After uncovering Work, Contractor shall inspect conditions affecting installation of new products.

- B. Contractor shall report unsatisfactory or questionable conditions in writing to District as indicated in the General Conditions and shall proceed with Work as indicated in the General Conditions by District.

3.02 PREPARATION:

- A. Contractor shall provide shoring, bracing and supports as required to maintain structural integrity for all portions of the Project, including all requirements of the Project.
- B. Contractor shall provide devices and methods to protect other portions of Project from damage.
- C. Contractor shall, provide all necessary protection from weather and extremes of temperature and humidity for the Project, including without limitation, any work that may be exposed by cutting and patching Work. Contractor shall keep excavations free from water.

3.03 ERECTION, INSTALLATION AND APPLICATION:

- A. With respect to performance, Contractor shall:
 - (1) Execute fitting and adjustment of products to provide finished installation to comply with and match specified tolerances and finishes.
 - (2) Execute cutting and demolition by methods that will prevent damage to other Work, and provide proper surfaces to receive installation of repairs and new Work.
 - (3) Execute cutting, demolition excavating, and backfilling by methods that will prevent damage to other Work and damage from settlement.
- B. Contractor shall employ original installer or fabricator to perform cutting and patching for:
 - (1) Weather-exposed surfaces and moisture-resistant elements such as roofing, sheet metal, sealants, waterproofing, and other trades.
 - (2) Sight-exposed finished surfaces.
- C. Contractor shall execute fitting and adjustment of products to provide a finished installation to comply with specified products, functions, tolerances, and finishes as shown or specified in the Contract Documents including, without limitation, the Drawings and Specifications.
- D. Contractor shall fit Work airtight to pipes, sleeves, ducts, conduit, and other penetrations through surfaces. Contractor shall conform to all Code requirements for penetrations or the Drawings and Specifications, whichever calls for a higher quality or more thorough requirement. Contractor shall maintain integrity of both rated and non-rated fire walls, ceilings, floors, etc.
- E. Contractor shall restore Work which has been cut or removed. Contractor shall install new products to provide completed Work in accordance with

requirements of the Contract Documents and as required to match surrounding areas and surfaces.

- F. Contractor shall refinish all continuous surfaces to nearest intersection as necessary to match the existing finish to any new finish.

END OF DOCUMENT

ALTERATION PROJECT PROCEDURES

PART 1 – GENERAL

1.01 RELATED DOCUMENTS AND PROVISIONS:

All Contract Documents should be reviewed for applicable provisions related to the provisions in this document, including without limitation:

- A. General Conditions, including, without limitation, Integration of Work, Purchase of Materials and Equipment, Uncovering of Work and Non-conforming Work and Correction of Work and Trenches;
- B. Special Conditions.

PART 2 - PRODUCTS

2.01 PRODUCTS FOR PATCHING AND EXTENDING WORK:

- A. New Materials: As specified in the Contract Documents including, without limitation, in the Specifications, Contractor shall match existing products, conditions, and work for patching and extending work.
- B. Type and Quality of Existing Products: Contractor shall determine by inspection, by testing products where necessary, by referring to existing conditions and to the Work as a standard.

PART 3 - EXECUTION

3.01 EXAMINATION:

- A. Contractor shall verify that demolition is complete and that areas are ready for installation of new Work.
- B. By beginning restoration Work, Contractor acknowledges and accepts the existing conditions.

3.02 PREPARATION:

- A. Contractor shall cut, move, or remove items as necessary for access to alterations and renovation Work. Contractor shall replace and restore these at completion.
- B. Contractor shall remove unsuitable material not as salvage unless otherwise indicated in the Contract Documents. Unsuitable material may include, without limitation, rotted wood, corroded metals, and deteriorated masonry and concrete. Contractor shall replace materials as specified for finished Work.

- C. Contractor shall remove debris and abandoned items from all areas of the Site and from concealed spaces.
- D. Contractor shall prepare surface and remove surface finishes to provide for proper installation of new Work and finishes.
- E. Contractor shall close openings in exterior surfaces to protect existing work from weather and extremes of temperature and humidity. Contractor shall insulate ductwork and piping to prevent condensation in exposed areas. Contractor shall insulate building cavities for thermal and/or acoustical protection, as detailed.

3.03 INSTALLATION:

- A. Contractor shall coordinate Work of all alternations and renovations to expedite completion and to accommodate District occupancy.
- B. Designated Areas and Finishes: Contractor shall complete all installations in all respects, including operational, mechanical work and electrical work.
- C. Contractor shall remove, cut, and patch Work in a manner to minimize damage and to provide a means of restoring Products and finishes to original or specified condition.
- D. Contractor shall refinish visible existing surfaces to remain in renovated rooms and spaces, to specified condition for each material, with a neat and square or straight transition to adjacent finishes.
- E. Contractor shall install products as specified in the Contract Documents, including without limitation, the Specifications.

3.04 TRANSITIONS:

- A. Where new Work abuts or aligns with existing, Contractor shall perform a smooth and even transition. Patched Work must match existing adjacent work in texture and appearance.
- B. When finished surfaces are cut so that a smooth transition with new Work is not possible, Contractor shall terminate existing surface along a straight line at a natural line of division and make a recommendation for resolution to the District and the Architect for review and approval.

3.05 ADJUSTMENTS:

- A. Where removal of partitions or walls results in adjacent spaces becoming one, Contractor shall rework floors, walls, and ceilings to a smooth plane without breaks, steps, or bulkheads.
- B. Where a change of plane of 1/4 inch or more occurs, Contractor shall submit a recommendation for providing a smooth transition to the District and the Architect for review and approval.

- C. Contractor shall trim and seal existing wood doors and shall trim and paint metal doors as necessary to clear new floor finish and refinish trim as required.
- D. Contractor shall fit Work at penetrations of surfaces.

3.06 REPAIR OF DAMAGED SURFACES:

- A. Contractor shall patch or replace portions of existing surfaces, which are damaged, lifted, discolored, or showing other imperfections, in the area where the Work is performed.
- B. Contractor shall repair substrate prior to patching finish.

3.07 CULTIVATED AREAS AND OTHER SURFACE IMPROVEMENTS:

- A. Cultivated or planted areas and other surface improvements which are damaged by actions of the Contractor shall be restored by Contractor to their original condition or better, where indicated.
- B. Contractor shall protect and replace, if damaged, all existing guard posts, barricades, and fences.
- C. Contractor shall give special attention to avoid damaging or killing trees, bushes and/or shrubs on the Premises and/or identified in the Contract Documents, including without limitation, the Drawings.

3.08 FINISHES:

- A. Contractor shall finish surfaces as specified in the Contract Documents, including without limitations, the provisions of all Divisions of the Specifications.
- B. Contractor shall finish patches to produce uniform finish and texture over entire area. When finish cannot be matched, Contractor shall refinish entire surface to nearest intersections.

3.09 CLEANING:

- A. Contractor shall continually clean the Site and the Premises as indicated in the Contract Documents, including without limitation, the provisions in the General Conditions and the Specifications regarding cleaning.

END OF DOCUMENT

CONTRACT CLOSEOUT AND FINAL CLEANING

PART 1 - GENERAL

1.01 RELATED DOCUMENTS AND PROVISIONS

All Contract Documents should be reviewed for applicable provisions related to the provisions in this document, including without limitation:

- A. General Conditions, including, without limitation, Completion of Work;
- B. Special Conditions;
- C. Temporary Facilities and Controls.

1.02 CLOSEOUT PROCEDURES

Contractor shall comply with all closeout provisions as indicated in the General Conditions.

1.03 FINAL CLEANING

- A. Contractor shall execute final cleaning prior to final inspection.
- B. Contractor shall clean interior and exterior glass and all surfaces exposed to view; remove temporary labels, tape, stains, and foreign substances, polish transparent and glossy surfaces, wax and polish new vinyl floor surfaces, vacuum carpeted and soft surfaces.
- C. Contractor shall clean equipment and fixtures to a sanitary condition.
- D. Contractor shall replace filters of operating equipment.
- E. Contractor shall clean debris from roofs, gutters, down spouts, and drainage systems.
- F. Contractor shall clean Site, sweep paved areas, and rake clean landscaped surfaces.
- G. Contractor shall remove waste and surplus materials, rubbish, and construction facilities from the Site and surrounding areas.

1.04 ADJUSTING

Contractor shall adjust operating products and equipment to ensure smooth and unhindered operation.

1.05 RECORD DOCUMENTS AND SHOP DRAWINGS

- A. Contractor shall legibly mark each item to record actual construction, including:
 - (1) Measured depths of foundation in relation to finish floor datum.
 - (2) Measured horizontal and vertical locations of underground utilities and appurtenances, referenced to permit surface improvements.
 - (3) Measured locations of internal utilities and appurtenances concealed in construction, referenced to visible and accessible features of the Work.
 - (4) Field changes of dimension and detail.
 - (5) Details not on original Contract Drawings
 - (6) Changes made by modification(s).
 - (7) RFIs indicated on the plans with the actual RFI on the back side of the adjoining page.
 - (8) References to related Shop Drawings and modifications.
- B. Contractor will provide one set of Record Drawings to District.
- C. Contractor shall submit all required documents to District and/or Architect prior to or with its final Application for Payment.

1.06 INSTRUCTION OF DISTRICT PERSONNEL

- A. Before final inspection, at agreed upon times, Contractor shall instruct District's designated personnel in operation, adjustment, and maintenance of products, equipment, and systems.
- B. For equipment requiring seasonal operation, Contractor shall perform instructions for other seasons within six months or by the change of season.
- C. Contractor shall use operation and maintenance manuals as basis for instruction. Contractor shall review contents of manual with personnel in detail to explain all aspects of operation and maintenance.
- D. Contractor shall prepare and insert additional data in Operation and Maintenance Manual when the need for such data becomes apparent during instruction.
- E. Contractor shall review contents of manual with personnel in detail to explain all aspects of operation and maintenance.

1.07 SPARE PARTS AND MAINTENANCE MATERIALS

- A. Contractor shall provide products, spare parts, maintenance, and extra materials in quantities specified in the Specifications and in Manufacturer's recommendations.
- B. Contractor shall provide District with all required Operation and Maintenance Data at one time. Partial or piecemeal submissions of Operation and Maintenance Data will not be accepted.

PART 2 – PRODUCTS Not used.

PART 3 – EXECUTION Not used.

END OF DOCUMENT

OPERATION AND MAINTENANCE DATA

PART 1 – GENERAL

1.01 RELATED DOCUMENTS AND PROVISIONS:

All Contract Documents should be reviewed for applicable provisions related to the provisions in this document, including without limitation:

- A. General Conditions, including, without limitation, Completion of the Work;
- B. Special Conditions.

1.02 QUALITY ASSURANCE:

Contractor shall prepare instructions and data by personnel experienced in maintenance and operation of described products.

1.03 FORMAT:

- A. Contractor shall prepare data in the form of an instructional manual entitled "OPERATIONS AND MAINTENANCE MANUAL & INSTRUCTIONS" ("Manual").
- B. Binders: Contractor shall use commercial quality, 8-1/2 by 11 inch, three-side rings, with durable plastic covers; two inch maximum ring size. When multiple binders are used, Contractor shall correlate data into related consistent groupings.
- C. Cover: Contractor shall identify each binder with typed or printed title "OPERATION AND MAINTENANCE MANUAL & INSTRUCTIONS"; and shall list title of Project and identify subject matter of contents.
- D. Contractor shall arrange content by systems process flow under section numbers and sequence of Table of Contents of the Contract Documents.
- E. Contractor shall provide tabbed fly leaf for each separate product and system, with typed description of product and major component parts of equipment.
- F. Text: The content shall include Manufacturer's printed data, or typewritten data on 24 pound paper.
- G. Drawings: Contractor shall provide with reinforced punched binder tab and shall bind in with text; folding larger drawings to size of text pages.

1.04 CONTENTS, EACH VOLUME:

- A. Table of Contents: Contractor shall provide title of Project; names, addresses, and telephone numbers of the Architect, any engineers, subconsultants, Subcontractor(s), and Contractor with name of responsible parties; and schedule of products and systems, indexed to content of the volume.

- B. For Each Product or System: Contractor shall list names, addresses, and telephone numbers of Subcontractor(s) and suppliers, including local source of supplies and replacement parts.
- C. Product Data: Contractor shall mark each sheet to clearly identify specific products and component parts, and data applicable to installation. Delete inapplicable information.
- D. Drawings: Contractor shall supplement product data to illustrate relations of component parts of equipment and systems, to show control and flow diagrams. Contractor shall not use Project Record Documents as maintenance drawings.
- E. Text: The Contractor shall include any and all information as required to supplement product data. Contractor shall provide logical sequence of instructions for each procedure, incorporating manufacturer's instructions.
- F. Warranties/Guarantees and Bonds: Contractor shall bind in one copy of each.

1.05 MANUAL FOR MATERIALS AND FINISHES:

- A. Building Products, Applied Materials, and Finishes: Contractor shall include product data, with catalog number, size, composition, and color and texture designations. Contractor shall provide information for re-ordering custom manufactured products.
- B. Instructions for Care and Maintenance: Contractor shall include Manufacturer's recommendations for cleaning agents and methods, precautions against detrimental agents and methods, and recommended schedule for cleaning and maintenance.
- C. Moisture Protection and Weather Exposed Products: Contractor shall include product data listing applicable reference standards, chemical composition, and details of installation. Contractor shall provide recommendations for inspections, maintenance, and repair.
- D. Additional Requirements: Contractor shall include all additional requirements as specified in the Specifications.
- E. Contractor shall provide a listing in Table of Contents for design data, with tabbed fly sheet and space for insertion of data.

1.06 MANUAL FOR EQUIPMENT AND SYSTEMS:

- A. Each Item of Equipment and Each System: Contractor shall include description of unit or system, and component parts and identify function, normal operating characteristics, and limiting conditions. Contractor shall include performance curves, with engineering data and tests, and complete nomenclature, and commercial number of replaceable parts.
- B. Panelboard Circuit Directories: Contractor shall provide electrical service characteristics, controls, and communications.

- C. Contractor shall include color coded wiring diagrams as installed.
- D. Operating Procedures: Contractor shall include start-up, break-in, and routine normal operating instructions and sequences. Contractor shall include regulation, control, stopping, shut-down, and emergency instructions. Contractor shall include summer, winter, and any special operating instructions.
- E. Maintenance Requirements: Contractor shall include routine procedures and guide for trouble-shooting; disassembly, repair, and reassembly instructions; and alignment, adjusting, balancing, and checking instructions.
- F. Contractor shall provide servicing and lubrication schedule, and list of lubricants required.
- G. Contractor shall include manufacturer's printed operation and maintenance instructions.
- H. Contractor shall include sequence of operation by controls manufacturer.
- I. Contractor shall provide original manufacturer's parts list, illustrations, assembly drawings, and diagrams required for maintenance.
- J. Contractor shall provide control diagrams by controls manufacturer as installed.
- K. Contractor shall provide Contractor's coordination drawings, with color coded piping diagrams as installed.
- L. Contractor shall provide charts of valve tag numbers, with location and function of each valve, keyed to flow and control diagrams.
- M. Contractor shall provide list of original manufacturer's spare parts, current prices, and recommended quantities to be maintained in storage.
- N. Additional Requirements: Contractor shall include all additional requirements as specified in Specification(s).
- O. Contractor shall provide a listing in Table of Contents for design data, with tabbed fly sheet and space for insertion of data.

1.07 SUBMITTAL:

- A. Contractor shall submit to the District for review two (2) copies of preliminary draft or proposed formats and outlines of the contents of the Manual within thirty (30) days of Contractor's start of Work.
- B. For equipment, or component parts of equipment put into service during construction and to be operated by District, Contractor shall submit draft content for that portion of the Manual within ten (10) days after acceptance of that equipment or component.

- C. Contractor shall submit two (2) copies of a complete Manual in final form prior to final Application for Payment. Copy will be returned with Architect/Engineer comments. Contractor must revise the content of the Manual as required by District prior to District's approval of Contractor's final Application for Payment.
- D. Contractor must submit two (2) copies of revised Manual in final form within ten (10) days after final inspection.

PART 2 – PRODUCTS Not Used.

PART 3 – EXECUTION Not Used.

END OF DOCUMENT

WARRANTIES/GUARANTEES

PART 1 - GENERAL

1.01 RELATED DOCUMENTS AND PROVISIONS

All Contract Documents should be reviewed for applicable provisions related to the provisions in this document, including without limitation:

- A. General Conditions, including, without limitation, Warranty/Guarantee Information;
- B. Special Conditions.

1.02 FORMAT

- A. Binders: Contractor shall use commercial quality, 8-1/2 by 11 inch, three-side rings, with durable plastic covers; two inch maximum ring size.
- B. Cover: Contractor shall identify each binder with typed or printed title "WARRANTIES/GUARANTEES" and shall list title of Project.
- C. Table of Contents: Contractor shall provide title of Project; name, address, and telephone number of Contractor and equipment supplier; and name of responsible principal. Contractor shall identify each item with the number and title of the specific Specification, document, provision, or section in which the name of the product or work item is specified.
- D. Contractor shall separate each warranty with index tab sheets keyed to the Table of Contents listing, providing full information and using separate typed sheets as necessary. Contractor shall list each applicable and/or responsible Subcontractor(s), supplier(s), and/or manufacturer(s), with name, address, and telephone number of each responsible principal(s).

1.03 PREPARATION:

- A. Contractor shall obtain warranties, executed in duplicate by each applicable and/or responsible subcontractor(s), supplier(s), and manufacturer(s), within ten (10) days after completion of the applicable item or work. Except for items put into use with District's permission, Contractor shall leave date of beginning of time of warranty until the date of completion is determined.
- B. Contractor shall verify that documents are in proper form, contain full information, and are notarized, when required.
- C. Contractor shall co-execute submittals when required.
- D. Contractor shall retain warranties until time specified for submittal.

1.04 TIME OF SUBMITTALS:

- A. For equipment or component parts of equipment put into service during construction with District's permission, Contractor shall submit a draft warranty for that equipment or component within ten (10) days after acceptance of that equipment or component.
- B. Contractor shall submit for District approval all warranties and related documents within ten (10) days after date of completion. Contractor must revise the warranties as required by the District prior to District's approval of Contractor's final Application for Payment.
- C. For items of work delayed beyond date of completion, Contractor shall provide an updated submittal within ten (10) days after acceptance, listing the date of acceptance as start of warranty period.

1.05 QUALITY ASSURANCE

- A. Co-execute submittals when required. Acceptance of manufacturer's guarantees/warranties by the District shall not be construed to limit the District's recourse to Contractor for correction of defects under the law and in accordance with the General Conditions.
- B. At both the eleventh and twenty-second month of the warranty period the Contractor Representative(s), Specific Subcontractor Representative(s), along with the District Representative(s) shall inspect all major components and systems to ensure they are properly functioning. Any item found to be not functioning properly shall be corrected to function properly at no additional expense to the District. Prior to substantial completion these major components and systems shall be listed and agreed upon by all parties. This list does not limit items that are required for review.

PART 2 - PRODUCTS Not Used.

PART 3 – EXECUTION Not Used.

END OF DOCUMENT

RECORD DOCUMENTS

PART 1 - GENERAL

1.01 RELATED DOCUMENTS AND PROVISIONS:

All Contract Documents should be reviewed for applicable provisions related to the provisions in this document, including without limitation:

- A. General Conditions, including, without limitation, Documents on Work;
- B. Special Conditions.

PART 2 PART 2 - RECORD DRAWINGS

2.01 GENERAL:

- A. As indicated in the Contract Documents, the District will provide Contractor with one set of reproducible, full size original Contract Drawings (mylars).
- B. Contractor shall maintain at each Project Site one set of marked-up plans and shall transfer all changes and information to those marked-up plans, as often as required in the Contract Documents, but in no case less than once each month. Contractor shall submit to the Project Inspector one set of reproducible vellums of the Project Record Drawings ("As-Built") showing all changes incorporated into the Work since the preceding monthly submittal. The As-Built shall be available at the Project Site. The Contractor shall submit reproducible vellums at the conclusion of the Project following review of the blue line prints.
- C. Label and date each Record Drawing "RECORD DOCUMENT" in legibly printed letters.
- D. All deviations in construction, including but not limited to pipe and conduit locations and deviations caused by without limitation Change Orders, Construction Claim Directives, RFI's, and Addenda, shall be accurately and legibly recorded by Contractor.
- E. Locations and changes shall be done by Contractor in a neat and legible manner and, where applicable, indicated by drawing a "cloud" around the changed or additional information.

2.02 RECORD DRAWING INFORMATION:

- A. Contractor shall record the following information:
 - (1) Locations of Work buried under or outside each building, including, without limitation, all utilities, plumbing and electrical lines, and conduits.

- (2) Actual numbering of each electrical circuit to match panel schedule.
- (3) Locations of significant Work concealed inside each building whose general locations are changed from those shown on the Contract Drawings.
- (4) Locations of all items, not necessarily concealed, which vary from the Contract Documents.
- (5) Installed location of all cathodic protection anodes.
- (6) Deviations from the sizes, locations, and other features of installations shown in the Contract Documents.
- (7) Locations of underground work, points of connection with existing utilities, changes in direction, valves, manholes, catch basins, capped stubouts, invert elevations, etc.
- (8) Sufficient information to locate Work concealed in each building with reasonable ease and accuracy.

In some instances, this information may be recorded by dimension. In other instances, it may be recorded in relation to the spaces in the building near which it was installed.

- B. Contractor shall provide additional drawings as necessary for clarification.
- C. Contractor shall provide reproducible record drawings, made from final Shop Drawings marked "No Exceptions Taken" or "Approved as Noted."

PART 3 - RECORD SPECIFICATIONS

3.01 GENERAL:

Contractor shall mark each section legibly to record manufacturer, trade name, catalog number, and supplier of each Product and item of equipment actually installed.

PART 4 - MAINTENANCE OF RECORD DOCUMENTS

4.01 GENERAL

- A. Contractor shall store Record Documents apart from documents used for construction as follows:
 - (1) Provide files and racks for storage of Record Documents.
 - (2) Maintain Record Documents in a clean, dry, legible condition and in good order.
- B. Contractor shall not use Record Documents for construction purposes.

PART 5 – PRODUCTS Not Used.

END OF DOCUMENT

SECTION 02080

LIMITED HAZARDOUS MATERIALS ABATEMENT AND DISPOSAL SPECIFICATIONS

ASBESTOS CONTAINING ROOFING MATERIALS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. The General Conditions and Division I General Requirements shall be included in and made part of this Section.
- B. Examine all other Sections of the Specifications for requirements therein affecting the work of this Section of the Specifications.

1.2 COMPLIANCE AND INTENT

- A. The Contractor is responsible for repair, to the satisfaction of The Lodi Unified School District, of surfaces not scheduled for demolition that become damaged as a result of the work. All unscheduled repair work shall be at no increase to contract price.
- B. Contractor shall coordinate removal with all site requirements related to protection of existing finishes. Water and encapsulants used during abatement work must not migrate beyond established regulated work area barriers. All protection work must be completed prior to work the start of abatement work on each floor and any pathways of travel on other floors.
- C. This project deals with abatement of asbestos-containing materials (ACMs). It is necessary for the Contractor to coordinate all abatement work with the project drawings and specifications. During all work, the contractor shall provide monitoring and worker protective equipment in accordance with the California Occupational Safety and Health Administration (Cal-OSHA) and as required by this specification. Where there is conflict, the most stringent requirement shall apply.
- A. This document includes minimum requirements for hazardous materials handling, control, and abatement activities, as applicable, including, but not limited to:
 - 1. Handling and disposal of asbestos-containing building materials (ACBM).
 - 2. Criteria for clearance
- D. Hazardous materials shall be removed and disposed of according to all federal, state and local regulations. The Contractor shall determine if additional hazardous materials will be impacted by the scope of the abatement work. The cleanup of any incidental asbestos found in areas undergoing abatement of asbestos that become separated from the building during the dismantling process are part of the work.
- E. All contractor personnel conducting abatement activities shall receive EPA-accredited training and be certified for asbestos abatement work. Any contractors involved in the demolition or preparation of painted or varnished surfaces shall

conduct all work in accordance with DOSH's lead construction standard, Title 8 CCR 1532.1. Furnish all labor, materials, facilities, equipment, services, employee training, medical monitoring, permits and agreements necessary to perform the work required for asbestos abatement in accordance with this specification.

- F. Comply with all federal, state, and local regulations pertaining to asbestos removal, storage, transportation and disposal; employee health and safety; Contractor certifications; and all licenses, permits, and training.
- G. Work on the premises shall be confined to areas designated in the Contract Documents. Materials and equipment shall be stored within areas designated by The Lodi Unified School District. Should additional space be required, the Contractor shall request permission for additional space and shall adequately safeguard occupants from associated health and safety hazards.
- H. Perform all work specified herein with competent persons trained, knowledgeable and qualified in state-of-the-art techniques relating to asbestos abatement, handling, and the subsequent cleaning of contaminated areas.
- I. During removal activities, the Contractor shall protect against contamination of soil, water, plant life, sensitive building finishes, adjacent building areas, and shall ensure that there is no airborne release of dusts. The Lodi Unified School District may collect air samples in the building and in adjacent areas to evaluate the Contractor's performance. Evidence of settled dust or airborne levels of contaminants above background will require the implementation of additional controls at no increase to contract price.
- J. It is the Contractor's responsibility to determine the quantities of ACMs that will require removal prior to commencement of the project. The Contractor shall conduct a site visit to determine exact locations of materials that will require abatement. This section provides appropriate protocols for handling and disposal of ACMs. All ACMs shall be removed according to the procedures outlined in this specification. If additional suspect ACMs are discovered during the course of the abatement work, immediately notify The Lodi Unified School District and/or their The Lodi Unified School Districtmental Consultant.
- K. The work of this section shall be performed by an entity that holds a current, valid asbestos handling license issued by the California State Contractor's Licensing Board (SCLB) and a current valid Certificate of Registration for Asbestos-Related Work issued by the California Department of Industrial Relations-Division of Occupational Safety and Health (Cal-OSHA), unless other specified. Display copies of CSLB license and Cal-OSHA Registration in a visible place at the job-site.
- L. ACMs removed during the abatement activities shall be disposed of in an approved manner complying with all applicable federal, state, and local regulations. Appropriate waste manifests or letters of salvage shall be furnished to The Lodi Unified School District thereby limiting their liability for improperly salvaged items. Materials are conveyed to the Contractor "as is," without any warranty, expressed or implied, including but not limited to, any warranty to marketability or fitness for a particular purpose, or any purpose.

- M. The removal of exterior ACM shall be conducted in a regulated area with poly drop sheets and asbestos warning signs, exterior ACM removed using mechanical methods or aggressive methods that render the material friable must be removed in a negative-pressure enclosure. The removal of asbestos-containing roofing materials shall be removed using wet methods and allowing no visible emissions or runoff to storm drains. Evidence of the release of asbestos above the background level will necessitate additional controls including but not limited to an enclosure.

1.3 DEFINITIONS

- N. The following definitions pertain to work of this section.
1. Abatement: Process of controlling fiber release from ACMs including encapsulation, enclosure, controlled renovation procedures, removal, clean-up and disposal.
 2. ACM: Asbestos-containing material
 3. Aggressive Sampling: Air sampling either during or following the agitation of the air.
 4. AHERA: Asbestos Hazard Emergency Response Act (40 CFR Part 763).
 5. Airlock: A system for permitting ingress and egress with minimum air movement between a contaminated area and uncontaminated areas. Typically consists of two curtained or gasketed doorways separated by a distance of at least six feet such that one passes through one doorway into the airlock, allowing the doorway to close off the opening. This airlock must be maintained in uncontaminated condition at all times.
 6. Ambient Air Quality: The quality of air (in terms of airborne fiber content) that is present in a given space.
 7. Area Monitoring: Sampling of airborne asbestos fiber concentrations within the work area and outside the work area. Sampling shall represent airborne concentrations that may reach the breathing zone.
 8. Asbestos Fibers: Refers to asbestos fibers having an aspect ratio of 3:1, and those fibers longer than five (5) microns.
 9. Asbestos Permissible Exposure Limit (PEL): A level of airborne fibers specified by OSHA as an occupational exposure standard for asbestos. This level represents the 8-hour time-weighted average of 0.1 fibers per cubic centimeter of air as measured by Phase Contrast Microscopy (PCM) analytical method.
 10. Asbestos-Containing Material (ACM): Those manufactured products and construction materials including structural and mechanical building materials, as well as packings and gaskets that contain more than one percent (1.0%) asbestos by weight.
 11. Asbestos: Asbestos includes asbestiform varieties of serpentinite (chrysotile), riebeckite (crocidolite), cummingtonite-gunerite (amosite), anthophyllite, tremolite, and actinolite. For the purposes of determining worker respiratory protection, both the asbestiform and non-asbestiform of the above minerals,

and any chemically treated or altered materials shall be considered as asbestos.

12. Authorized Visitor: Designated employees or consultants for The Lodi Unified School District and representatives of any federal, state or local regulatory or other agency having jurisdiction over the project.
13. Baseline: Refers to the background levels of asbestos monitored before abatement.
14. Breathing Zone: A hemisphere forward of the shoulders and head with a radius of approximately six to nine inches.
15. Breach: A rift or gap in the critical or secondary barriers that allow egress of air from the containment to outside, or vice versa.
16. Bridging Encapsulant: An encapsulant that forms a discrete layer on the surface of an in-situ asbestos matrix.
17. Cal-OSHA: State of California, Occupational Safety & Health Administration.
18. Chain-of-Custody: A legal concept involving documentation of the physical possession of a sample(s) from the moment it is collected, transported, analyzed, and ultimately stored in an archive.
19. Change Rooms: Refers to the two chambers in the decontamination area used to change into and out of protective clothing.
20. Certified Industrial Hygienist (CIH): A person certified by the American Board of Industrial Hygiene.
21. Clean Room: An uncontaminated area or room that is part of the worker decontamination enclosure system, with provisions for storage of workers' street clothes and protective equipment.
22. Clearance Level: Clearance level for samples analyzed by PCM will be less than 0.01 fibers per cubic centimeter of air and for TEM will be less than 70 structures per square millimeter ($<70 \text{ s/mm}^2$). Samples may be collected by aggressive or non-aggressive sampling methods and the minimum air volume shall be 1,200 liters.
23. Competent Person: One who is capable of identifying existing and predictable hazards and who has the authority to take prompt corrective measures to eliminate them.
24. Critical Barrier: A unit of temporary construction that provides the only separation between asbestos work area and an adjacent potential occupied space. This includes the decontamination unit, perimeter walls, ceilings, penetrations and any temporary critical barriers between the work area and the uncontaminated the Lodi Unified School Districtment.
25. CSLB: Contractors State Licensing Board
26. Decontamination Area: Area which is constructed to provide the means for workers to store clothing, equipment and other articles, and to properly remove contamination upon concluding work activities that result in exposure to these hazardous materials.

- 27. DOP: Dioctylphthalate, the challenge aerosol used to perform on-site leak testing of HEPA filtration equipment.
- 28. DOT: Federal Department of Transportation.
- 29. DOSH: Division of Occupational Safety & Health (see also Cal-OSHA)
- 30. Decontamination Unit: Refers to system of airlocks used to decontaminate personnel, waste bags, equipment, etc. when exiting the work area. A decontamination unit shall be set up for each containment area.
- 31. Demolition: The wrecking or taking out of any load-supporting structural member of a facility together with any related handling operations or the intentional burning of any facility.
- 32. Disposal Bag: Minimum six (6) mil thick leak-tight plastic bags used for transporting asbestos waste from a work area to disposal or shipping container. Each disposal bag must have required labels according to Title 8 CCR 1529 (Cal-OSHA asbestos rule), 5194 (HAZCOM). RACM waste must be additionally labeled according to 49 CFR 171-179 (USDOT), and 40 CFR 61 Subpart M (NESHAP). Hazardous waste disposal bags must be labeled with generator's name, address, site location, generator number, and the following information:

CONTAINS ASBESTOS FIBERS
AVOID CREATING DUST
CANCER AND LUNG DISEASE HAZARD
AVOID BREATHING AIRBORNE ASBESTOS
RQ WASTE ASBESTOS, 9 NA 2212 PG III
(Class 9 placard)
HAZARDOUS WASTE
STATE AND FEDERAL LAW
PROHIBITS IMPROPER DISPOSAL
IF FOUND, CONTACT THE NEAREST
POLICE OR PUBLIC SAFETY
AUTHORITY OR THE CALIFORNIA
DEPARTMENT OF TOXIC SUBSTANCES CONTROL

- 33. Encapsulant: A liquid material that can be applied to ACMs that controls the possible release of asbestos fibers from the material either by creating a membrane over the surface (bridging) or by penetrating into the material and binding its components together (penetrating encapsulant).
- 34. Encapsulation: A specified procedure necessary to coat ACMs or asbestos contaminated surfaces with an encapsulant to control the possible release of asbestos fibers into the ambient air.
- 35. Enclosure: The construction of an airtight, impermeable, permanent barrier surrounding the ACM to prevent the release of asbestos fibers into the air.
- 36. Equipment Decontamination Enclosure System: A decontamination enclosure system for materials and equipment, typically in a designated area of the work area, and including a washroom, a holding area, and an uncontaminated area.

37. Equipment Room: A contaminated area or room that is part of the worker decontamination enclosure system, with provisions for storage of contaminated clothing and equipment. The equipment room shall be kept clean from asbestos-containing debris at all times.
38. Excursion Limit: A California Code of Regulations (Title 8 CCR 1529) requirement that ensures no employee exposed to airborne concentrations of asbestos in excess of 1.0 fibers per cubic centimeter of air as averaged over a sampling period of thirty (30) minutes.
39. Filter: A media component used in respirators to remove solid or liquid particles from the inspired air.
40. Fixed Object: A unit of equipment or furniture in the work area that cannot be removed from the work area.
41. Friable Asbestos-Containing Material: Material that contains more than 1.0% asbestos by weight, and that can be crumbled, pulverized or reduced to powder by hand pressure when dry.
42. Foreman: An individual who typically fulfills the duties of "competent person" as defined by Title 8 CCR 1529. This individual must supply documentation of a passing grade in an Cal-OSHA accredited course in Asbestos Contractor/Supervisor training. The foreman must be on-site during all abatement work.
43. Glove Bag: A polyethylene bag with two inward projecting long sleeve gloves, designed to enclose an object from which an ACM is to be removed. Bags shall be seamless at the bottom, have a minimum thickness of 6 mil, and shall be labeled appropriately.
44. Glove Bag Technique: A method for removing ACM from heating, ventilation and air conditioning (HVAC) ducts, piping runs, valves, joints, elbows, and other non-planar surfaces. The glove bag is constructed and installed in such a manner that it surrounds the object or material to be removed and contains all asbestos fibers released during the process. Secondary containment shall be provided for all glove bag work unless otherwise noted.
45. Gross or Full Abatement: Designated rooms, spaces, or areas of the project that have been totally sealed, contained in polyethylene, equipped with decontamination enclosure systems, and placed under negative pressure.
46. HEPA: High Efficiency Particulate Air filter capable of filtering out airborne particulate 0.3 microns or greater in diameter at 99.97 percent efficiency.
47. Manifest: The document authorized by both Federal and State authorities for tracking the movement of ACMs.
48. Movable Object: A unit of equipment or furniture in the work area that can be removed from the work area (e.g., smoke detectors, lights, etc.)
49. Negative Pressure Respirator: A respirator in which the air pressure inside the respiratory inlet covering is positive during exhalation in relation to the air pressure of the outside atmosphere, and negative during inhalation in relation to the air pressure of the outside atmosphere.

50. Negative Pressure: Air pressure lower than surrounding areas, generally caused by exhausting air from a sealed space (work area).
51. NESHAP: National Emission Standard for Hazardous Air Pollutants – EPA Regulation 40 CFR Subpart M, Part 61.
52. NIOSH: National Institute for Occupational Safety and Health: Sets test standards, analytical methods, and certifies performance of various respirator designs (research institute within Federal OSHA).
53. NIST: National Institute of Standards and Technology: Administers the NVLAP Program.
54. NOA – Naturally Occurring Asbestos. Found in soil, fill and concrete.
55. NVLAP: National Voluntary Laboratory Accreditation Program – evaluates and certifies laboratories doing PLM and TEM analyses.
56. Passive Sampling: Refers to air sampling with no air agitation.
57. Permissible Exposure Limits (PEL): A level of airborne fibers specified by OSHA as an occupational exposure standard for asbestos. This level represents the 8-hour time-weighted average of 0.1 fibers per cubic centimeter of air and 30 minute excursion limit of 1.0 fibers per cubic centimeter of air as measured by Phase Contrast Microscopy (PCM) analytical method.
58. Phase Contrast Microscopy (PCM): Technique using a light microscope equipped to provide enhanced contrast between the fibers and the background. Filters are cleared with a chemical solution and viewed through the microscope at a magnification of approximately 400X. This method does not distinguish between fiber types and only counts those fibers longer than 5 microns and wider than approximately 0.25 microns. Because of these limitations, fiber counts by PCM typically provide only an index of the total concentration of airborne asbestos in the the Lodi Unified School Districtment monitored.
59. Polarized Light Microscopy (PLM): An optical microscope technique used to identify asbestos content and distinguish between different types of asbestos fibers by their shape and unique optical properties.
60. Powered Air Purifying Respirator (PAPR): A full facepiece respirator that has the breathing air powered to the wearer after it has been purified through a filter.
61. Protection Factor: The ratio of the ambient concentration of an airborne substance to the concentration of the substance inside the respirator at the breathing zone of the wearer. The protection factor is a measure of the degree of protection provided by a respirator to the wearer.
62. Remodel: Replacement or improvement of an existing building or portion thereof where exposure to airborne asbestos may result. Remodel includes, but is not limited to, installation of materials, demolition, cutting, patching, and removal of building materials.
63. Respirator: A device designed to protect the wearer from the inhalation of harmful atmospheres.

64. Shower Room: A room between the clean room and the equipment room in the work decontamination enclosure system. This room contains hot and cold or warm running water and soap suitably arranged for complete showering during decontamination. The shower room comprises an airlock between contaminated and clean areas.
65. Surfactant: A chemical wetting agent added to water to improve penetration, this reducing the quantity of water required for a given operation or area.
66. Transmission Electron Microscopy (TEM): Asbestos structure analysis for a specified volume of air. TEM is a technique that focuses an electron beam onto a thin sample. As the beams transmits through certain areas of the sample, an image resulting from varying densities of the sample is projected onto a fluorescent screen. TEM is the state-of-the-art analytical method for identifying asbestos fibers collected in air samples in non-industrial settings. TEM microscopes equipped with selected area electron diffraction (SAED) capabilities also can provide information on the crystal structure of an individual particle.
67. Visible Emissions: Any emission containing particulate material that is visually detectable without the aid of instruments. This does not include condensed uncombined water vapor.
68. Visual Inspection: A visual inspection by their designated representative, of the work area under adequate lighting to ensure that the work area is free of visible PCB material, debris, and dust.
69. Washroom: A room between the work area and the holding area in the equipment decontamination enclosure system equipped with water for decontamination of equipment and sealed waste containers. The washroom or shower room comprises one airlock.
70. Water Filtration: Refers to water filtration to as small a particulate size as technically feasible, but not more than 5 microns.
71. Wet Cleaning: The process of eliminating asbestos contamination from building surfaces and objects by using cloths, mops, HEPA vacuuming, or other cleaning utensils dampened with amended water and afterward thoroughly decontaminated or disposed of as asbestos contaminated waste.
72. Work Area: The area where asbestos removal is performed and that is defined or isolated to prevent the spread of asbestos fibers, dust or debris, and entry by unauthorized personnel. Work area is a regulated area as defined by Title 8 CCR 1529.

1.4 SCOPE OF WORK

- A. Provide the removal of ACMs as specified in this section. Reference all other sections of the Specifications and other documents included in the contract documents for information and requirements that affect the work of this Section.
- B. Table 1 below provides estimated quantities of ACMs requiring removal. A 20% variance of quantity of actual ACM shown in the Table and estimated ACM is not considered a changed condition. The Contractor is responsible for field verifying quantities of ACMs and difficulty in abating the same.

TABLE I
ASBESTOS-CONTAINING MATERIALS

Material	Typical Locations	Analytical Concentration	Approximate Quantity
Lakewood School Roof Level			
Transite Roof Shingling - Grey	Material is Present throughout Main Roofing Field of Structure	10% Chrysotile	~20,000 sf
Roofing Felt Layers	Material is Assumed Present throughout Main Roofing Field of Structure	ASSUMED	~20,000 sf

sf = square feet

- C. The following materials shall be disposed of as regulated asbestos-containing material (RACM): Roofing felt layers (unless tested and found to be non-asbestos containing) and all other Category I and Category II materials rendered friable during the removal process. It is currently assumed that all felt layers beneath transite shingles are asphalt impregnated and are not friable by nature. This condition must be assessed as soon as removal begins.
- D. The following materials can be disposed of as Category II Non-friable ACMs if not rendered friable during removal: Transite shingling associated with the primary roofing field system, if removed substantially intact.

1.5 REFERENCES

The publications listed below form a part of this specification by reference. The publications are referred to in the text by basic designation only. If there is a conflict between any of the listed regulations or standards, then the most stringent or restrictive shall apply.

- A. American National Standards Institute (ANSI) and American Society for Testing and Materials (ASTM)
1. ANSI Z9.2, 1979 (R 1991), Fundamentals Governing the Design and Operation of Local Exhaust Systems
 2. ANSI Z87.1, 2003, Occupational and Educational Eye and Face Protection
 3. ANSI Z88.2 1992, Respiratory Protection
 4. ANSI Z89.1, 1986, Requirements for Protective Headgear for Industrial Workers
 5. ANSI Z41, 1999, Personal Protection – Protective Footwear

6. ANSI Z88.6, 1984, Respiratory Protection – Respiratory Use Physical Qualifications for Personnel
 7. ASTM C 732, 1982 (R 1987) Aging Effects of Artificial Weathering on Latex Sealants
 8. ASTM D 522, 1993 (Rev. A) Mandrel Bend Test of Attached Organic Coatings
 9. ASTM D 1331, Solutions of Surface-Active Agents
 10. ASTM D 2794, 1993 Resistance of Coatings to the Effects of Rapid Deformation (Impact)
 11. ASTM E 84, 1991 (Rev. A) Surface Burning Characteristics of Building Materials
 12. ASTM E 96, 1994 Water Vapor Transmission of Materials
 13. ASTM E 119, 1988 Fire Tests of Building Construction and Materials
 14. ASTM E 736, 1992 Cohesion/Adhesion of Sprayed Fire-Resistive Materials Applied to Structural Members
 15. ASTM E849, 1986 Safety and Health Requirement Relating to Occupational Exposure to Asbestos
 16. ASTM E 1368, 1990 Visual Inspection of Asbestos Abatement Projects
 17. ASTM E1494, 1992 Specifications for Encapsulants for Friable Asbestos-Containing Building Materials
- B. California Assembly Bills (CAB)
1. CAB 040, Yearly Registration of Contractors
- C. California Code of Regulations (CCR)
1. Title 8 CCR 5208, General Industry – Asbestos
 2. CCR CARS, Carcinogen and Asbestos Registration Sections 340-344.53, 341.6 Amended, and 341.9 Amended Through 341.14
 3. CCR ESO, Electrical Safety Orders, Chapter 4, Subchapter 5
 4. CCR 1523, Illumination
 5. CCR 1529, Asbestos in the Construction Industry
 6. CCR 1531, Construction Respiratory Protective Equipment
 7. CCR 3203, Injury and Illness Prevention Program
 8. CCR 3204, Access to Employee Exposure and Medical Records
 9. CCR 3220, Emergency Action Plan
 10. CCR 3221, Fire Prevention Plan
 11. CCR 5144, Respiratory Protection Equipment Standard
 12. CCR 5194, Hazard Communication Standard
 13. CCR 6003, Accident Prevention Signs
 14. Title 22, Division 4, Minimum Standards for Management of Hazardous and Extremely Hazardous Waste

- D. California Health Services (CHS) Titles 22 and 23, California Administrative Code Disposal Requirements
 - 1. CHS 25123, Section 25123
 - 2. CHS 25124, Section 25124
 - 3. CHS 25143, Section 25143
 - 4. CHS 25163, Section 25163
 - 5. CHS 66508, Section 66508
 - 6. CHS 66510, Section 66510
 - 7. CHS DIV 4, Division 4, Commencing with Section 66000, "Disposal"
- E. California Health and Safety Code (CHSC)
 - 1. CHSC 20, Division 20, Commencing with Section 24200
- F. California Labor Code (CLC)
 - 1. CLC DIVISION 5, Part 1, commencing with 6300
- G. California Propositions (CP)
 - 1. CP 65, Proposition 65
- H. California State Board of Equalization (CSBE)
 - 1. CSBE ETU, Excise Tax Unit
- I. California State License Board (CSLB)
 - 1. CSLB CBPC, California Business and Professional Code Sections 7058.5 and 7058.7, "Certification"
- J. Code of Federal Regulations (CFR)
 - 1. 29 CFR 1910.134, Respiratory Protection
 - 2. 29 CFR 1910.141, Sanitation
 - 3. 29 CFR 1910.145, Accident Prevention Signs and Tags
 - 4. 29 CFR 1926.21, Safety Training and Education
 - 5. 29 CFR 1926.55, Gases, Vapors, Fumes, Dusts, and Mists
 - 6. 29 CFR 1926.65, Hazardous Waste Operations and Emergency Response
 - 7. 29 CFR 1926.59, Hazard Communication
 - 8. 29 CFR 1910.1000, Air Contaminants
 - 9. 29 CFR 1926.1101, Asbestos
 - 10. 40 CFR 61-SUBPART A, General Provisions
 - 11. 40 CFR 61-SUBPART M, National Emission Standard for Asbestos
 - 12. 40 CFR 260, Hazardous Waste Management Systems: General
 - 13. 40 CFR 745, Lead; Requirements for Lead-Based Paint Activities
 - 14. 40 CFR 763, Asbestos Containing Material in Schools

- K. State and Local Regulations
 - 1. Rule 902, Sacramento Metropolitan Air Quality Management District
- L. Underwriters Laboratories, Inc. (UL)
 - 1. UL 586-96, 1996 Test Performance of High-Efficiency Particulate Air Filter Units

1.6 SUBMITTALS PRIOR TO START OF WORK

- A. The reviews by The Lodi Unified School District or their designated representative are intended to be only for general conformance with the requirements. The Lodi Unified School District or their designated representative assumes no responsibility for permits, licenses, notices, materials and methods, equipment or temporary construction required to execute the work described in this Section of the Specification or in other Sections of the Specification or in other documents included in the contract documents.
- B. Before commencing work involving the abatement of asbestos, submit the following for review by The Lodi Unified School District or their designated representative.
 - 1. Provide a detailed asbestos abatement work plan that follows Attachment A – Asbestos Abatement Work Plan Outline.
 - 2. Provide an asbestos site safety plan prior to project initiation. The site safety plan shall deal with, at a minimum: site safety and health hazards; fiber release incidents; control of water leakage or discharge within and/or from the work area; medical emergency; asbestos handling procedures; fall protection; electrical safety; Contractor's internal administrative and inspection procedures; earthquakes and/or fire emergency procedures; protocol for responding to complaints or questions from interested parties; 24-hour emergency telephone numbers for company officers with authority to respond to emergencies.
 - 3. Competent Person (as defined by Title 8 CCR 1529): Demonstrate education and specialized training with successful completion of examination of a Cal-OSHA accredited asbestos training course.
 - 4. Submit current certificates (less than 11 months) signed by each employee and trainer that the employee has received proper training in the handling of materials that contain asbestos. Include documentation showing that the worker understands the following; health implications and risks involved (including the illnesses possible from exposure to airborne asbestos fibers), the use and limits of the respiratory equipment to be used, and the results of monitoring of airborne quantities of asbestos concerning health and respiratory equipment.
 - 5. Proof of Respirator Fit Testing: Provide proof of respirator fit testing. Fit testing records must be less than eleven (11) months old and document testing on the type of respiratory protective equipment used for this project. Fit testing records must be signed by the Competent Person.
 - 6. Foreman Training: Submit evidence that the foreman to be used on the job fulfills the qualifications detailed in this specification and has experience in similar jobs.

7. Medical Examinations: Submit evidence signed by a physician that each employee used on the job has received an appropriate medical examination as detailed in Title 8 CCR 1529. The submitted document must be less than eleven (11) months old.
8. Written Notification to Fire and Police Departments: Provide documentation showing notification to local fire and police departments of the abatement three (3) days before commencement.
9. Rental Equipment: When rental equipment is to be used in the abatement areas or to transport hazardous waste, the Contractor shall provide written notification regarding intended use of the rental equipment to the rental agency before use, with copies to their The Lodi Unified School Districtmental Consultant.
10. Certificates of Compliance: Submit manufacturer's certification that vacuums, ventilation equipment, and other equipment required to contain airborne asbestos fibers conform to ANSI Z9.2. Submit results of onsite DOP testing of all HEPA-filtered ventilation equipment.
11. Satisfactory proof that written notification and subsequent updates have been provided to the Bay Area Air Quality Management District (BAAQMD), in accordance with Regulation 11, Rule 2, Cal-OSHA, and Title 40 CFR Part 61 Subparts A&M, National Emission Standards for hazardous Air Pollutant, U.S. EPA.
12. Licenses: Submit copies of state and local licenses, evidence of Cal-OSHA registration and permits necessary to carry out the work of this contract.
13. Notification of Other Contractors: If other contractors are working at the job site, before beginning any work the Contractor must inform all other contractors in writing regarding the location, nature, and requirements of the work areas.
14. Material Safety Data Sheets/Specification Sheets: The Contractor shall submit Material Safety Data and Specification Sheets for all chemicals, encapsulants, etc. to be used for this project.

1.7 SUBMITTALS AT THE COMPLETION OF THE PROJECT

- A. Upon completion of on-site work, Contractor shall provide a detailed project summary that will include each of the items listed below. The project Summary shall be submitted and approved by The Lodi Unified School District prior to acceptance of final pay request and shall include the following:
 1. Copies of the Security and Safety Logs showing names of persons entering the workspace. The logs shall include date and time of entry and exit, supervisor's record of any accident (detailed description of accident).
 2. Chain of custody documentation and laboratory reports for all analyses performed.
 3. Emergency evacuations and any other safety or health incident.
 4. Submit uniform hazardous and non-hazardous waste manifests prepared, signed and dated by an agent of the landfill. The manifest must certify the amount of hazardous materials delivered to the landfill. The manifest must be

provided to The Lodi Unified School District or their designated representative within ten working days after delivery.

5. Personal air sample results.
6. Pressure differential strip chart readings for each differential recording device on the site.
7. Project Summary:
 - a. Abatement contractor's name and address, certification number (CSLB), registration number (DOSH) and Tax ID number.
 - b. Hazardous waste hauler certifications (DOT).
 - c. Name, address and registration number of hazardous waste hauler.
 - d. Laboratory performing analyses (NVLAP).
 - e. Contract number and name of project.
 - f. Specific inventory (including locations and approximate quantities) of the hazardous materials which were removed or handled.
 - g. Number of employees working on the project.
 - h. Dates of commencement and completion of on-site work.
 - i. Work method employed (i.e., glove bag, mini-containment, full containment with negative air and decontamination enclosure system, etc.)
 - j. Name, location, telephone number and EPA registration of waste disposal site(s) used.
 - k. DOP testing results.

1.8 CONTRACTOR MONITORING

- A. The Lodi Unified School District or their designated representative reserves the right to perform air sampling in selected areas during the course of the project. The Lodi Unified School District or their designated representative reserves the right to stop work within in an area if in the course of performing monitoring, The Lodi Unified School District or their designated representative observes instances of substantial non-conformance with the this Section or other Sections of the Specification presenting health hazards to workers, the general public or the surrounding areas. Work shall not resume until the corrective measures have been enforced. Instances of substantial non-conformance shall include, but not be limited to, the following:
 1. Activities or misconduct imperiling worker's safety and health.
 2. Airborne fiber concentrations as measured by PCM outside of the containment area exceeding background or 0.01f/cc whichever is greater. Airborne concentrations as measured by TEM outside of the containment area exceeding background or 70 S/mm², whichever is greater.
 3. Loss of negative pressurization for more than two minutes.
 4. Breaches in containment resulting in potential release of asbestos to non-work areas.

- B. The Lodi Unified School District or their representative may perform air sampling inside and outside the hazardous materials work area during all phases of the work. The Contractor shall cooperate fully with The Lodi Unified School District and ensure the cooperation of his workers during collection of air samples and work area inspections.
- C. When visual inspections or air monitoring are specified, the Contractor shall notify The Lodi Unified School District or their designated representative in writing 24 hours in advance of the day and time when the Contractor will be ready for such inspections or monitoring. Such requests shall be initiated by the Contractor's Competent Person or Foreman indicating that the work area has been previously inspected and is ready for inspection/testing.
- D. Air monitoring generated by The Lodi Unified School District or their designated representative shall not be used by the Contractor to represent compliance with regulatory agency requirements for monitoring of workers exposure to airborne asbestos, nor shall any other activity on the part of The Lodi Unified School District or their designated representative be construed to meet the Contractor's compliance with applicable health and safety regulations.

PART 2 - PRODUCTS

2.1 SIGNS AND LABELS:

- A. Provide labeling in accordance with State and Federal EPA requirements. Provide the required signs, labels, warnings, placards or posted instructions for containers used to transport hazardous material to the landfill.
- B. Location of Caution Signs and Labels: Provide bilingual caution signs at all approaches to work areas in languages used by the Contractor's employees. Locate signs at such a distance that personnel may read the sign and take the necessary protective steps required before entering the area. Provide labels and affix to all asbestos-containing materials, scrap, waste, debris, and other products contaminated with hazardous materials.
- C. Warning Sign Format: Vertical format conforming to Title 8 CCR 1529:

DANGER
ASBESTOS
MAY CAUSE CANCER
CAUSES DAMAGE TO LUNGS
AUTHORIZED PERSONNEL ONLY

- D. Warning Label Format: Provide labels that comply with Title 8 CCR 1529 of sufficient size to be clearly legible, displaying the following legend:

2.2 ENCAPSULANTS

- A. The usage of encapsulants is not anticipated during the scope of this project.

2.3 PLASTIC SHEETING:

- A. Use fire-retardant (FR) polyethylene (poly) film.
 - 1. Thickness - 6-mil, minimum, NO EXCEPTIONS.
 - 2. Flame Resistance/Flame Spread Rate <25.
 - 3. Conforms to NFPA #701 and Tested in accordance with ASTM E-84.

2.4 TAPE, ADHESIVE, SEALANTS:

- A. Tape, 2" or wider, shall be capable of sealing joints of adjacent sheet of polyethylene and shall attach polyethylene sheet to finished or unfinished surfaces or similar materials. Tape shall be capable of adhering under dry and wet conditions, including use of amended water. Taping to critical or sensitive surfaces shall be completed using preservation sealing tape.
- B. Spray adhesive for sealing polyethylene to polyethylene shall contain no methylene chloride or methyl chloroform (1,1,1-trichloroethane) compounds.

2.5 STRIP CHART RECORDER(S):

- A. Differential air pressure systems shall be in accordance with Appendix J of EPA's "Guidance for Controlling Asbestos-Containing Materials in Buildings, EPA 560/5-85-024. The Differential pressure system shall be continuously monitored by the Contractor using a recording instrument. The recording instrument shall be connected to an audible alarm that will activate at a pressure differential of -0.025 inches water gauge air pressure.

2.6 VACUUM EQUIPMENT:

- A. All vacuum equipment used in the work area shall use HEPA filtration systems and be of the wet-dry type. The Contractor shall provide on-site independent DOP testing to document the effectiveness of the vacuum units. The test results shall be signed by the individual performing the testing. Repeat DOP testing every thirty (30) days after initial testing. Provide documentation to The Lodi Unified School District or their designated representative with 24 hours of DOP testing.

2.7 LOCAL EXHAUST SYSTEM:

- A. If containments become required, sufficient High Efficiency Particulate Absolute (HEPA) ventilation units shall be used to maintain the negative pressure in each interior work area at 0.025 inches of water column and a minimum of four (4) air changes per hour.
- B. The ventilation system shall remain in operation 24 hours a day until the work area has passed the specified clearance criteria. HEPA filtered air which is exhausted to maintain negative pressure shall be exhausted from the building at locations approved by The Lodi Unified School District or their designated representative. Exhausted air shall not be near or adjacent to other building intake vents or louvers.

or at entrances to buildings. Other HEPA units shall operate within the enclosure to circulate air and control fiber counts.

- C. The Contractor shall provide on-site independent DOP testing to document the effectiveness of the air filtration units. The test results shall be signed by the individual performing the testing. Repeat testing if the unit or the air filtration units have been repaired or replaced. Repeat DOP testing after thirty (30) days after initial testing. Provide documentation to The Lodi Unified School District or their designated representative with 24 hours of DOP testing.

2.8 RESERVE EQUIPMENT:

- A. Contractor shall have the following equipment on site: two reserve, functioning and DOP-tested HEPA Filter Vacuum Cleaning Units, two reserve and DOP-tested HEPA area filtration units for every four containments. Contractor shall also have sufficient polyethylene (poly), respirators, protective equipment, tape, tools, decontamination enclosure systems for each work area.
- B. Provide authorized visitors requiring access to the work area with suitable protective clothing, headgear, eye protection, as described in this specification, whenever the visitor must enter the work area. The Contractor shall have available and maintain at all times a minimum of three (3) suits and other suitable protective equipment for this purpose. All protective equipment shall be new and for the exclusive use of visitors.
- C. The Contractor shall document that each visitor has been trained and fit-tested prior to entering an abatement area.

2.9 SCAFFOLDING:

- A. Scaffolding, as required to do the specified work, shall meet all applicable safety regulations and DOSH standards. A non-skid surface shall be furnished on all scaffold surfaces subject to foot traffic. Scaffolding shall be adequately protected to prevent contamination of planking and framing.

2.10 TRANSPORTATION EQUIPMENT:

- A. Transportation equipment, as required, shall be lockable and suitable for loading, temporary storage, transit and unloading of contaminated waste without exposure to persons or property. Any vehicle used to transport asbestos waste shall be properly registered with all applicable controlling agencies.

2.11 CONNECTIONS TO WATER SUPPLY:

- A. Contractor shall assure that all connections to the site's water system shall include backflow protection. Valves shall be temperature and pressure rated for operation of the temperatures and pressures encountered. After use, connections and fittings shall be removed without damage or alteration to existing water piping and equipment. Leaking or dripping valves shall be piped to the nearest drain or located over an existing sink or grade where water shall not damage existing finishes or equipment.

- B. Employ heavy-duty abrasion-resistant hoses with a pressure rating greater than the maximum pressure of the water distribution system in each work area. Provide fittings as required to allow for connection to existing wall hydrants or spouts.

2.12 WATER HEATER:

- A. The usage of full three stage decontainment chambers is not anticipated as part of the scope of this project.

2.13 OTHER TOOLS AND EQUIPMENT:

- A. The Contractor shall provide other suitable tools for the stripping, removal and disposal activities.
- B. Prohibited Equipment: The following equipment is prohibited from use on this project unless accepted in writing by The Lodi Unified School District or their designated representative:
 - 1. High or low pressure water blasting equipment for hosing of work areas.
 - 2. Bead blasting or other uncontained abrasive blasting methods.
 - 3. Vacuum-powered removal or collection equipment located outside the asbestos work area, such as a "Vacu-Loader".
 - 4. Gasoline, propane, diesel or other fuel powered equipment inside the building, unless previously approved in writing by The Lodi Unified School District or their designated representative.
 - 5. Equipment that creates excessive noise or vibration that would affect the safety of the building or generate complaints from neighboring building occupants. No equipment shall exceed an A-weighted sound level of 85 dB as measured at 3 ft. from the radiating source without written permission of The Lodi Unified School District or their designated representative.
 - 6. Metal wire-brushes.
 - 7. Flammable solvents with a flash point below 140 degrees F or materials containing ethylene glycol ether, methylene chloride, ethyl chloroform (1,1,1-trichloroethane), or other hazardous substances.
 - 8. Non-fire retardant polyethylene sheeting.
 - 9. Polyurethane spray foam for application in fire-rated assemblies, including but not limited to penetrations into stairwells, mechanical rooms, electrical closets, rated floor-to-floor assemblies, etc.

PART 3 - EXECUTION

3.1 INITIAL AREA ISOLATION

- A. The Lodi Unified School District or their designated representative reserves the right to inspect and approve all containment setups before any abatement is undertaken.
- B. Baseline samples and visual inspections shall be conducted within the attic space of the referenced school, in order to identify the potential presence of pre-existing conditions within the space. During the project, additional inspections and air

sampling shall be performed within this area in order to verify that roof level contamination is not gaining entry to the building interior.

- C. The confirmed influx of asbestos containing materials will result in more stringent containment techniques, and may necessitate the isolation of the building interior using polyethylene sheeting or other means within the attic/plenum of the school.
- D. If a containment area is breached (failure of polyethylene seals, visible dust emission, fiber counts above background level, etc.), the Contractor shall take immediate action to control the breach and clean the area to the satisfaction of The Lodi Unified School District or their designated representative.
- E. If sample results indicate that conditions have exceeded the baseline or clearance criteria, as determined by The Lodi Unified School District or their designated representative, all work shall cease. Work shall not recommence until the condition(s) causing the increase have been corrected.
- F. Verify that all electrical power, gas, sewage, water, phone lines, fire life safety lines and sprinkler systems to the work area have been shut down and disconnected so that there is no possibility of reactivation and electrical shock.
- G. Provide all connections for temporary utilities in the work area needed throughout abatement. Temporary electrical power shall be according to OSHA and the National Electrical Code for Wet Environments.
- H. Contractor shall conform to their lockout requirements, and secure the work area at all times. Area entrances and exits shall be secured by the Contractor throughout the abatement phase. Unauthorized visitors are strictly prohibited. Only the Contractor, The Lodi Unified School District or their designative representatives are permitted at the job site. Contractor shall ensure that all doors, gates, windows, and potential entrances to the work areas and the designated waste location areas are secured and locked at the end of each workday.
- I. Contractor shall store all materials, equipment, and supplies for the project inside the building or in areas designated by The Lodi Unified School District and in accordance with their requirements.
- J. As required, establish designated limits for the abatement work area with continuous barriers. Use barrier tape (3-inch) with a pre-printed asbestos warning throughout exterior asbestos abatement activities. Provide signs around the perimeter of all the interior works areas according to EPA and Cal-OSHA.
- K. Contractor shall provide temporary sanitary services of adequate capacity to handle the maximum estimated crew size plus an additional twenty percent. Contractor shall maintain the temporary facilities throughout the duration of the project.
- L. The Contractor shall be responsible for identifying all HVAC components (if applicable) that lead into or out of the work areas. All components shall be disconnected and sealed airtight for the duration of the abatement work. All openings shall be sealed with two (2) layers of 6 mil polyethylene secured with duct tape, as applicable.

- M. Pre-clean the work area and fixed objects in the work area using HEPA filtered vacuums and/or wet cleaning methods. Protect fixed objects with protective barriers (as appropriate) and cover with 6 mil poly sealed with tape.

3.2 CONTAINMENT SET-UP PROCEDURES

- A. Containment is not required for exterior work including removal of asphalt roofing materials and transite shingling if removed in a non-friable state. However, all work shall be conducted within an asbestos regulated area as required by Cal-OSHA. Contractor shall seal operable windows and air intakes within 50 feet of the work area with 6-mil polyethylene sealed with tape.
- B. Any disturbance of ACMs must be performed within a regulated area. If dust or debris is generated from asbestos related activity, work must be performed in a mini-enclosure with negative pressure or critical barrier containment.
- C. A decontamination area shall be established on the roof for abatement of asphalt roofing materials and immediately adjacent to all exterior regulated work areas. Decontamination areas shall include a wash area. All wash water shall be captured and disposed or filtered as required by applicable regulations and best industry practices.

3.3 PERSONNEL PROTECTION

- A. Informed Workers:
 - 1. All workers shall be informed of the hazards of ACMs and any other hazardous materials exposure. Workers shall also be instructed in the use and fitting of respirators, protective clothing, decontamination procedures, and all other aspects associated with the abatement work.
- B. Personal Hygiene Practices:
 - 1. The Contractor shall enforce and follow good personal hygiene practices during the abatement of ACMs. These practices will include but not be limited to the following: no eating, drinking, smoking or applying cosmetics in the work area. The Contractor shall provide a clean space, separated from the work area, for these activities.
 - 2. Workers shall remove street clothes in the clean room and put on a respirator and clean protective clothing before entering the work area. Upon exiting the work area, remove gross contamination from clothing before leaving the work area; proceed to the change room and remove clothing except respirators; proceed to the shower; clean the outside of the respirator with soap and water while showering; remove respirator and thoroughly wash. Following showering, proceed directly to the clean room and dress in street clothes. Do not wear disposable clothing outside the decontamination enclosure system.
 - 3. If data gathered by The Lodi Unified School District or their designated representative in areas adjacent to the work areas shows exposure to airborne asbestos or other hazardous materials exceeding Cal-OSHA criteria, that area will become regulated and workers must wear protective clothing and approved respirators and must have a shower facility provided to them.

C. Respirators:

1. Establish a respiratory protection program as outlined by ANSI and required by Cal-OSHA. Select respirators from those approved by the National Institute for Occupational Safety and Health (NIOSH). Respirators selected must be approved by the Competent Person. Submit program for review a minimum of five (5) working days prior to the commencement of abatement activities.
2. Provide workers with approved and personally-issued respirators with replaceable filters. Provide sufficient quantity of filters approved by NIOSH for use in asbestos the Lodi Unified School Districtments so that workers can change filters as required by the manufacturer.
3. At a minimum, provide each employee with the following respiratory protection for each work phase:
 - a. Pre-cleaning, containment set-up, and containment removal work: NIOSH-approved, half-face respirators with HEPA cartridges.
 - b. Asbestos abatement of thermal systems insulation, acoustical plaster, and drywall with ACM texture: full-face powered-air purifying respirators (PAPRs) with HEPA cartridges.
 - c. Asbestos abatement of drywall with asbestos containing joint compound, floor tile mastics, residual flooring mastics, carpet mastic, HVAC duct sealant, asphalt roofing products, window & door frame sealants, window putty, mirror mastics, acoustical wall tile mastic, asbestos mineral core fire doors, transite, and : half-face respirators with HEPA cartridges and organic vapor cartridges (as necessary).
4. At all times, respiratory protection selected shall, at a minimum, meet the requirements of the Table 1 below.

Table 1 – Respiratory Protection

<u>Airborne Concentration of Asbestos</u>	<u>Required Respirator</u>
Not in excess of 1.0 f/cc (10 X PEL)	Half-mask air purifying respirator other than a disposable respirator, equipped with high efficiency filters
Not in excess of 5.0 f/cc (50 X PEL)	Full facepiece air purifying respirator equipped with high efficiency filters
Not in excess of 100 f/cc (1000 X PEL)	Any powered air purifying respirator equipped with high efficiency filters or any supplied air respirator operated in continuous flow mode
Not in excess of 100 f/cc (1,000 X PEL)	Full facepiece supplied air respirator operated in pressure demand mode
Greater than 100 f/cc or unknown concentration	Full facepiece supplied air respirator operated in pressure demand mode, equipped with an auxiliary positive pressure self-contained breathing apparatus

5. Provide Type C continuous flow or pressure-demand, supplied-air respirators if the average airborne concentration of asbestos exceeds 100 times the permissible exposure limit; i.e., 8-hour time-weighted average (TWA) and

ceiling limit. Use the respirators presented in Title 8 CCR 1529 that afford adequate protection at such upper concentrations of airborne asbestos. When Type C Respirators are required provide the following:

- a. The air supply system shall provide Grade D breathing air that conforms to OSHA and ANSI Commodity Specification for Air.
- b. Compressed Air System for Type C Respirators shall be high pressure, with a compressor capable of satisfying the respirator manufacturer's recommendations. The compressed air system shall have compressor failure alarm, high temperature alarm, and a carbon monoxide alarm. It also shall have suitable in-line air purifying absorbent beds and filters to assure Grade D breathing air.
- c. Use of Belt: Type C respirators shall be worn with belt to minimize possibility of dislodging face mask when hose is snagged in the work area.

D. Protective Clothing:

1. Provide personnel exposed to asbestos fibers with fire retardant disposable protective whole body clothing, head coverings, gloves, and foot coverings. Provide appropriate gloves to protect workers hands from exposure to hazardous materials. Make sleeves secure at the wrists and make foot coverings secure at the ankles with tape. Ensure that all personnel entering and leaving the work area follow this procedure. Suits shall be of adequate size to accommodate the largest employee. Foot covers may be part of the coveralls. Non-disposable footwear shall be left in the work area until it is decontaminated or disposed of at the completion of the job.
2. Protective clothing will be worn inside the work area after the area passes pre-abatement inspection and shall remain in use until the area passes final clearance inspection.

E. Eye Protection: Provide safety glasses or goggles to personnel removing or handling asbestos-containing materials and waste.

F. Shower Requirements: Contractor shall assure that all employees and visitors use protective equipment and the shower or wash down facility following each entry into the containment area after the start of the asbestos abatement.

G. Emergency Precautions and Procedures:

1. Establish emergency and fire exits from the work area. Display necessary signage at exits and paths to exits with representative visual aids. A diagram of all emergency and fire exits shall be posted in a conspicuous area proximate to the entrance to each work area.
2. The Contractor's supervisor/competent person shall be trained and certified in first aid and CPR, and 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 implement fiber reduction techniques until the injured person has been removed from the work area.

3. In the event of a loss of negative pressure to the work area, work shall stop immediately and entrances to the work area sealed tight. The Contractor shall also institute fiber reduction controls until negative pressure is re-established to acceptable levels.

3.4 ROOFING LEVEL ASBESTOS REMOVAL

- A. Establish a regulated area consisting of barrier tape and asbestos warning signs at least 10 feet from the work area. The edge of the roof can be considered one such barrier if sufficient controls have been established to prevent loss of roofing debris from the roof.
- B. Provide a decontamination area at the point of entry/exit to the regulated exterior or roof work area.
- C. Seal off openings within 50 feet of the work area including ducts, grills, and windows.
- D. Utilize fall protection and safety devices at all times during roof work whenever exposed to falls greater than six feet including at perimeter, shafts or skylights.
- E. Weather conditions should be dry and wind conditions less than 15 mph for roof and other exterior abatement activities.
- F. Establish a waste storage area where sealed bags of roofing materials are stored during removal. Line the storage area with a layer of 6-mil polyethylene sheeting. Dampen the surfaces with a fine spray of amended water before proceeding with removal.
- G. Keep ACMs damp throughout the removal process to the extent feasible.
- H. Cut, peel, and scrape the roofing materials as required to remove the largest pieces possible in layers. Materials shall be removed using manual methods and must remain substantially intact.
- I. Continue the removal until the roof decking is reached. Remove contaminated sleepers, flashing, and counter flashing as applicable.
- J. Place all removed asbestos roofing materials in waste bags or containers. All waste shall be removed from exterior and roofing regulated work areas by the end of each workday. In no case shall waste disposal containers be dropped or thrown from roof level. All ACM waste disposal containers shall be handled in a careful manner to prevent spills.
- K. Acceptable clearance criteria for exterior and roofing removal shall be no visible three-dimensional residue at removal locations. The Lodi Unified School District or their designated representative reserves the right to conduct visual inspections at the completion of the work.
- L. Visual inspections of accessible attic or plenum areas shall be performed regularly, at least as frequent as at the end of each work day. Any resulting contamination must be promptly cleaned before the end of each shift.

3.5 REGULATED AREA MONITORING

- A. Prior to each work shift and continuously throughout the project, each waste area and decontamination enclosure system shall be inspected and repaired as needed.
- B. Ambient asbestos fiber levels outside each work area shall not exceed 0.01 f/cc (PCM) or 70 s/mm² (TEM) or background whichever is greater. If the asbestos fiber concentrations outside work areas or within attic spaces exceed those levels shown above, then abatement must stop and operations be reviewed and modified until the fiber count can be reduced to within the acceptable limits.

3.6 AIR MONITORING

- A. The purpose of any air monitoring that may be conducted by The Lodi Unified School District or their designated representative will be to detect possible release of fibers or dusts (asbestos or lead) emanating from the work areas.
- B. All PCM air sample analysis shall comply with NIOSH Method 7400. All TEM analysis shall be consistent with modified-AHERA protocols or NIOSH 7402.
- C. The Lodi Unified School District or their designated representative reserves the right to perform and / or observe final clearance inspection and sampling.
- D. The method of analysis for pre-abatement and clearance air samples shall be via Phase Contrast Microscopy (PCM). The method of analysis for in-progress asbestos air samples shall be PCM and TEM at the option of The Lodi Unified School District or their designated representative.
- E. The Contractor shall be responsible for all personal air sampling. These samples shall be taken each shift and for each distinct crew operation, and shall be used to verify adequacy of fiber control and respiratory protection. Personal breathing zone air sampling shall be in accordance with the Cal-OSHA asbestos standard. A minimum of 25% of the workforce shall be monitored during each shift. All sample results shall be available on-site within 24-hours of sample collection. If two consecutive shifts of non-compliant or overloaded samples are noted, the contractor shall hire a CAC/CSST at their own expense to assist in compliance with the specifications.

3.7 CLEARANCE INSPECTIONS

- A. The Lodi Unified School District or their designated representative reserves the right to conduct visual inspections. Contractor shall notify The Lodi Unified School District or their designated representative when the decontamination process in each containment area is complete. Evidence of debris will require additional clean up by the Contractor. Contractor shall be responsible for re-cleaning all areas found to be deficient.
- B. If The Lodi Unified School District or their designated representative determines that the work area is sufficiently clean, the Contractor may proceed. If The Lodi Unified School District or their designated representative determines that certain areas require additional cleaning, the Contractor shall re-clean the work area and request a

second inspection of the recleaned area. All costs incurred by The Lodi Unified School District or their designated representative for inspections required after the second inspection will be charged to the Contractor.

- C. Asbestos Clearance Testing: At Lodi Unified School District's option, air clearance sampling may be conducted within interior areas at the close of abatement activities in order to confirm that no contamination of interior spaces has occurred as a result of abatement.

3.8 ASBESTOS CLEARANCE CRITERIA:

- A. Asbestos clearance criteria for this project shall be based on the visual absence of known asbestos containing materials upon completion of abatement.

3.9 ASBESTOS DISPOSAL

- A. It is the responsibility of the Contractor to determine current waste handling, labeling, transportation and disposal regulations for the work site and for each waste disposal landfill. The Contractor must comply fully with these Specifications, local, state, and federal regulations and provide documentation of the same.
- B. Ensure that polyethylene bags are sealed air-tight. All bags shall be wet cleaned prior to removing them from the equipment decontamination enclosure system.
- C. Ensure all disposal containers are properly labeled according to 8 CCR 1529, 5194 (HAZCOM), 49 CFR 171-179 (USDOT), 40 CFR 61 Subpart M (NESHAP), and any local regulations and state regulations as required by this specification.
- D. Filter all wastewater to the technically feasible limit, but not more than five (5) microns before disposal. Comply with all current local, state and federal codes relating to waste water release.
- E. Asbestos-containing waste that is properly labeled and sealed may be temporarily stored in areas approved by The Lodi Unified School District. Areas must be made secure before storing the waste. Waste is not to remain in temporary storage area for longer than one (1) week before final load-out of materials.
- F. All friable asbestos waste shall be double-wrapped prior to transport from the site.
- G. All vehicles used to transport hazardous waste must be registered with the Department of Toxic Substances Control and Department of Transportation and maintain proper registration and with vehicle at all times.
- H. All vehicles and containers used to transport waste are subject to inspection and approval of The Lodi Unified School District prior to departure from site.
- I. Contractor shall not throw bags into the truck in a way that may cause the bags to burst open.
- J. Contractor shall provide at minimum one (1) day advance notification to The Lodi Unified School District when signatures are required on manifest(s). The Contractor

shall ensure that the Hazardous Waste Manifest is correctly filled out. The Contractor shall give the appropriate copies to The Lodi Unified School District and shall also instruct The Lodi Unified School District in writing that they must send the appropriate copy to the Department of Toxic Substances Control.

- K. If a debris box is used, the Contractor shall make all necessary arrangement with The Lodi Unified School District including obtaining all appropriate permits.
- L. Contractor is responsible for all coordination with the waste disposal site and with the waste hauling company.
- M. Debris box shall be constructed with minimum 20-gauge steel with no windows or openings other than the door. Debris box for hazardous waste shall be fully lined with a double layer of polyethylene sheeting and must be locked at all times when unattended. Once the debris box is filled and the manifest is signed, Contractor must transport the debris box off the job site.
- N. Disposal shall be in a The Lodi Unified School District approved landfill that meets EPA requirements.

END OF SECTION 02080

Pre-renovation Hazardous Materials Survey

Lakewood Elementary School
1100 North Ham Lane
Lodi, California

November 28, 2022 | Report Number: NA227079



Nationwide
Terracon.com

- Facilities
- Environmental
- Geotechnical
- Materials



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November 28, 2022

Lodi Unified School District
1305 East Vine Street
Lodi, CA 95240

Attn: Mr. Ryan Lancaster
T: 209-712-6339
E: rlancaster@lodiUSD.net

RE: Pre-renovation Hazardous Materials Survey
1100 North Ham Lane
Lodi, California
Terracon Project No: NA227079

Dear Mr. Lancaster:

Terracon Consultants, Inc. (Terracon) is pleased to submit the attached report for the referenced site to Lodi Unified School District. The purpose of this report is to present the findings of the pre-renovation hazardous materials survey performed October 5 - 7, 2022. This survey was conducted in general accordance with Terracon's proposal PNA227079, dated September 27, 2022. We understand this survey was requested to identify and quantify asbestos-containing materials (ACM), lead-containing paints and materials, Poly Chlorinated Biphenyls (PCBs) materials (ballasts and building envelope sealants), and other hazardous materials likely to be impacted during the planned renovation of the elementary school campus.

Terracon collected three hundred four (304) samples from one hundred eleven (111) homogeneous areas of suspect ACMs. Asbestos content was confirmed in thirty-seven (37) of the materials identified, sampled, and analyzed. Twelve (12) painted surfaces and eighteen (18) other building materials suspected to contain lead were sampled and analyzed. Lead was detected in thirteen (13) of the surfaces or materials sampled. PCBs were detected in one (1) of the twelve (12) bulk samples collected from multiple building sealants, caulks, and gaskets. Other hazardous building materials present include mercury containing fluorescent light tubes, HID bulbs, suspect PCB lighting ballasts and regulated refrigerants, and life safety equipment with backup batteries. Please refer to the attached report for details.

Terracon appreciates the opportunity to provide this service to Lodi Unified School District. If you have any questions regarding this report, please contact our office at your convenience.

Sincerely,
Terracon Consultants, Inc.

Denise Wallen, CSST
Project Assistant

Kenneth Pilgrim, CAC
Department Manager

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PRE-RENOVATION HAZARDOUS MATERIALS SURVEY
LUSD Lakewood Elementary School
1100 North Ham Lane
Lodi, California

Terracon Project No. NA227079
November 28, 2022

1.0 INTRODUCTION

Terracon Consultants, Inc. (Terracon) conducted a limited pre-renovation hazardous materials survey of the elementary school campus located at 1100 North Ham Lane in Lodi, California (Site). The survey was conducted October 5 - 7, 2022 in general accordance with Terracon's proposal PNA227079, dated September 27, 2022, and the asbestos sampling protocols established in Environmental Protection Agency (EPA) regulation 40 Code of Federal Regulations (CFR) Part 763 Subpart E 763.86, (Asbestos Hazard Emergency Response Act, AHERA). Sample collection of suspect asbestos-containing materials (ACMs), lead containing paints (LCPs) and materials, and Poly Chlorinated Biphenyls (PCBs) materials was completed on the interior, exterior, and roof of structures A, B, C, D, and E, the roofs of the portable classrooms F, G1, and G2, the asphalt parking lot, and the concrete courtyard and walkways. Other hazardous building materials were noted if observed.

1.1 Project Objective

The objective of this survey was to identify the presence or absence of suspect ACMs, lead-containing paints and materials, Poly Chlorinated Biphenyls (PCBs) materials (ballasts and building envelope sealants), universal waste (fluorescent light tubes, mercury containing switches, batteries), and regulated refrigerants associated with the site structures that are likely to be impacted during the planned renovation work as detailed in the provided plans, Modernization Lakewood Elementary School, dated September 2, 2022. Per the demolition plans, Terracon understands the proposed scope of work includes:

- Flooring and base removal in all classrooms, teacher workrooms, janitorial closets, and library in Buildings A, B, C, D, and E. The multi-purpose room, kitchen areas, restrooms, and administrative rooms in Building D are excluded from the renovation and survey scopes.
- Painting of walls and ceilings in all classrooms, teacher workrooms, janitorial closets, and library in Buildings A, B, C, D, and E.
- Modernization of student toilet rooms in Buildings A, B, C, and E, including removal of partitions, accessories, lighting fixtures, toilets, sinks, doors, etc. The ceramic wainscot and floor will not be removed but will be refinished. The ceramic tile will be impacted during the preparatory work.
- Wall demolition and exterior door repositioning in Building E to accommodate new student toilet room.

- Removal of all concrete walkways and courtyard throughout campus and removal of asphalt parking lot.
- Overlay, sealing, and restriping of courts.
- Replacement of roofing at Buildings A, B, C, D, and E and Portables F, G1, and G2.

EPA regulation 40 CFR 61, Subpart M, the National Emission Standards for Hazardous Air Pollutants (NESHAP) prohibits the release of asbestos fibers to the atmosphere during renovation or demolition activities. The asbestos NESHAP requires that regulated ACM be identified, classified, and quantified prior to planned disturbances, renovations, or demolition activities.

1.2 Reliance

This report is for the exclusive use of Lodi Unified School District (LUSD) for the renovation of the structure located at 1100 North Ham Lane in Lodi, California. Reliance by any other party on this report is prohibited without written authorization of Terracon and LUSD. Reliance on this report by LUSD and all authorized parties will be subject to the terms, conditions, and limitations stated in the proposal, this report, and the project contract.

2.0 BUILDING DESCRIPTION

Buildings A, B, and C are single-level classroom pods, approximately 6,320 square feet (SF) in size. Each pod has five large rooms, a teacher's workroom, boy's and girl's restrooms, janitorial closet, and mechanical room. Building D is approximately 10,575 square feet and is comprised of four (4) classrooms, multipurpose room, kitchen and various storage rooms, administrative offices, and staff and student restrooms. Only the four classrooms and roof of Building D were included in the survey. Building E is approximately 1,425 square feet and consists of a single classroom with a student restroom and mechanical room. Typical interior finishes in all buildings are similar and include drywall walls, acoustical ceiling tiles, 9" vinyl floor tile beneath carpet, ceramic tiles in restrooms, rubber cove base, on a concrete slab. Exterior finishes of the structures are a combination of wood and brick with rolled asphalt roofs.

3.0 FIELD ACTIVITIES

3.1 Asbestos, Lead, PCBs, and Other Hazardous Building Materials

The survey was conducted by John Alexander, a California Division of Occupational Safety and Health (Cal/OSHA) Certified Asbestos Consultant (CAC) and California Department of Public Health (CDPH) Lead Inspector/Assessor (I/A) and Cal/OSHA Certified Site Surveillance Technician (CSST) and CDPH Lead Sampling Technician, Wyatt Renner. Copies of pertinent training certifications are included in Appendix F. The asbestos portion of the survey was conducted in general accordance with the sample collection protocols established in EPA 40 CFR Part 763 Subpart E 763.86, AHERA. Per regulatory requirements, Terracon sampled certain building materials in each structure separately. A summary of survey activities is provided below.

3.2 Visual Assessment - Asbestos

Survey activities were initiated with visual observation of the survey areas of the subject structures to identify homogeneous areas of suspect ACM. A homogeneous area (HA) consists of a building material that appears similar throughout in terms of color, size and texture with consideration given to the date of application. Assessment was conducted in all accessible areas of the A, B, C & D buildings including the interiors, exteriors, roofs, and surrounding hardscape. Survey excluded the multi-purpose room, kitchen areas, restrooms, and administrative rooms in Building D. Only the roof of the portable structures was included in the survey, the interiors and exterior perimeters were excluded.

3.3 Physical Assessment - Asbestos

A physical assessment of each HA of suspect ACM was conducted to assess the current friability and condition of the materials. A friable material is defined by the EPA as a material which can be crumbled, pulverized, or reduced to powder by hand pressure when dry. Friability was assessed by physically touching suspect materials.

Based on results of the visual observation, bulk samples of suspect ACM were collected in general accordance with EPA AHERA sampling protocols. Samples of suspect materials were collected from representative locations in each homogeneous area. Bulk samples were collected using wet methods as applicable to reduce the potential for fiber release. Samples were placed in sealable containers and labeled with unique sample numbers using an indelible marker.

The selection of sample locations and frequency of sampling were based on Terracon's observations and the assumption that like materials in the same area are homogeneous in content.

Terracon collected three hundred four (304) samples from one hundred eleven (111) homogeneous areas of suspect ACM. Laboratory analysis reported that thirty-seven (37) of the materials sampled contain asbestos. A summary of the materials reported as containing asbestos is included in Table I below and a summary of all suspect ACM samples collected during the survey is included as Appendix A.

3.4 Sample Analysis - Asbestos

Asbestos bulk samples were submitted under chain of custody to Eurofins EMLab P&K (EML) in Tustin, California for analysis by polarized light microscopy with dispersion staining techniques per EPA methodology 600/R-93/116. The percentage of asbestos, where applicable, was determined by microscopic visual estimation.

Fourteen (14) of the positive materials initially reported <1% by polarized light microscopy (PLM analysis) were additionally analyzed by point count methodology to reduce regulatory fees and enable flexibility during removal and disposal. Point counting is a process of more precisely quantifying the asbestos content in bulk samples that contain small amounts of asbestos. EML is accredited under the National Voluntary Laboratory Accreditation Program (NVLAP) Accreditation No. 200757-0. The laboratory reports for the asbestos bulk samples are included as Appendix B.

3.5 Lead Containing Paint and Bulk Materials

Terracon collected paint chip samples to determine the lead content in parts per million (ppm) of the predominant painted interior and exterior surfaces throughout the survey areas of the site structures. In addition, suspect lead containing ceramic tile and caulk were sampled to determine potential lead content. Suspect lead paint and bulk material samples were collected in sealable containers and labeled with unique sample numbers using an indelible marker.

3.6 Visual Assessment – Lead Containing Paint and Bulk Materials

Inspection activities began with visual observations of painted surfaces to identify unique combinations of paint. A unique combination of paint consists of paint that is applied to a building material and has similar color, substrate, and component. Assessment was conducted throughout the visually accessible survey areas of the site. Ceramic tile was observed in all restrooms and caulking associated with the exterior window frames was observed on all structures.

3.7 Physical Assessment – Lead Containing Paint and Bulk Materials

A physical assessment of each unique combination of paint was conducted to assess the condition of the paint. Lead paint chip samples were collected to comply with Cal-OSHA regulations (Title 8 CCR 1532.1 – Lead Exposure in Construction) for the proposed renovation activities. Paint was sampled to identify potential worker exposure and potential disposal restrictions. All painted surfaces were in fair condition and generally intact with the building substrates at the time of the survey.

Terracon sampled thirty (30) painted surfaces and bulk materials during the survey. Of the paints and materials sampled, thirteen (13) were found to contain lead concentrations in exceedance of the laboratory detection limit. A summary of suspect paint and bulk samples collected during the survey is summarized in Table II.

3.8 Sample Analysis - Lead Containing Paint and Bulk Materials

Paint chip and bulk material samples were submitted under chain of custody to EML in Tustin, California. Paint chip and material samples were analyzed by Flame Atomic Absorption method SW846-7000B. EML is accredited by the American Industry Hygiene Association's (AIHA) Environmental Lead Laboratory Accreditation Program (ELLAP) (Lab Code 178697) to perform Flame Atomic Absorption analysis. The laboratory reports for the lead samples are included as Appendix C.

3.9 PCBs - Interior / Exterior Sealants

Bulk sealant samples were collected using a razor knife and were placed into individual containers. Each sample was provided a discreet sample number, which was recorded on a chain of custody form. The samples were transported under chain of custody procedures to McCampbell Analytical, Inc. in Pittsburg, California. All samples were analyzed for PCB content in accordance with EPA Method SW8082. The laboratory reports for PCB samples are included as Appendix D.

Terracon collected twelve (12) bulk samples of suspect PCB containing materials throughout the structures. Eleven (11) samples collected were reported less than the laboratory reporting limit. The black window gasket at Building E was reported to contain PCBs, specifically 5,310 mg/kg of Aroclor1262. A summary of the PCB sealant results is included in Table III.

3.10 Visual Assessment - Other Hazardous Building Materials

The interior and exterior of the structures and the surrounding hardscape were visually surveyed for the presence of mercury containing products such as fluorescent light tubes, switches, high intensity discharge (HID) bulbs, and thermometers. Lighting fixtures were screened for the potential presence of PCB containing ballasts. Exit signs were evaluated for the presence of self-illuminating, tritium gas tubes (radioactive) and life safety equipment with backup battery supplies. Materials were visually assessed and noted if observed. No testing was performed.

4.0 REGULATORY OVERVIEW

4.1 Asbestos

The Asbestos NESHAP program in California is enforced by federal, state, and county Asbestos NESHAP Coordinators. For projects occurring in Lodi, California, the San Joaquin Valley Air Pollution Control District (SJVAPCD) governs renovation and demolition projects has been delegated authority from the EPA to enforce the Asbestos NESHAP within its respective jurisdictional boundaries, excluding tribal lands.

The asbestos NESHAP (40 CFR Part 61, Subpart M) regulates asbestos fiber emissions and asbestos waste disposal practices. The asbestos NESHAP regulation also requires the identification and classification of existing ACM according to friability prior to demolition or renovation activity. Friable ACM is a material containing more than 1% asbestos that, when dry, can be crumbled, pulverized or reduced to powder by hand pressure. All friable ACM is considered regulated asbestos-containing material (RACM). The NESHAP regulation is implemented locally by the SJVAPCD under Rule 4002.

The asbestos NESHAP regulation classifies ACM as either RACM, Category I non-friable ACM or Category II non-friable ACM. RACM includes all friable ACM, along with Category I and Category II non-friable ACM that has become friable, will be or has been subjected to sanding, grinding, cutting or abrading, or ACM that has a high probability of becoming or has become crumbled, pulverized, or reduced to powder during renovation or demolition activity. Category I non-friable ACM are exclusively asbestos-containing packings, gaskets, resilient floor coverings, and asphalt roofing products that contain more than 1% asbestos. Category II non-friable ACM are all other non-friable materials other than Category I non-friable ACM that contain more than 1% asbestos.

Friable ACM, along with Category I and Category II non-friable ACM, which is in poor condition and has become friable or which will be subjected to drilling, sanding, grinding, cutting, abrading and which could be crushed or pulverized during anticipated renovation or demolition activities are considered regulated ACM (RACM).

Building materials confirmed to be ACM through the collection of bulk sampling and subsequent laboratory analysis, or presumed ACM, must be removed prior to intentional disturbance during the planned renovation activities. Asbestos abatement must be conducted by California licensed and registered abatement contractors and workers with Cal/OSHA-accredited training. Third-party air monitoring is recommended during the abatement activities.

Cal/OSHA requires that only properly licensed and certified asbestos abatement contractors are allowed to remove ACM. As per NESHAP, all RACM shall be removed from a facility being demolished or renovated before any non-burning demolition or renovation begins that would break up, dislodge, or similarly disturb the material or preclude access to the material for subsequent removal. According to NESHAP, if more than 160 square feet or 260 linear feet of any RACM is to be stripped, removed, dislodged, cut, drilled, or similarly disturbed, or for any demolition, the asbestos abatement contractor or facility owner must submit an Asbestos Notification of Demolition and Renovation form to NESHAP along with the appropriate fees within at least 10 working days prior to the scheduled asbestos removal activity or demolition start date. Planned renovations that do not meet the definition of 'demolition or renovation of a facility' per NESHAP and where no ACM exists do not require notification to NESHAP.

The California Department of Occupational Safety and Health (DOSH) asbestos standard for construction (Title 8 CCR 1529) regulates workplace exposure to asbestos. The DOSH standard requires that employee exposure to airborne asbestos must not exceed 0.1 fibers per cubic centimeter of air (0.1 f/cc) as an eight-hour time weighted average (TWA) and not exceed 1.0 fibers per cubic centimeter of air (1.0 f/cc) over a 30-minute time period known as an excursion limit (EL). The TWA and EL are known as DOSH's asbestos permissible exposure limits (PELs). The DOSH standard classifies construction and maintenance activities which could disturb ACM and specifies work practices and precautions which employers must follow when engaging in each class of regulated work.

Asbestos containing construction materials (ACCM) is a term developed by Cal/OSHA out of concern for non-hazardous building materials used inside and outside a building that contain less than 1% asbestos. The definition of ACCM includes any manufactured building material that has more than one-tenth of 1% ($>0.1\%$) asbestos content. The SJVAPCD requires point counting of friable samples of ACM at concentrations of less than 10% to determine more accurately determine the content of asbestos and proper classification of the material for proper abatement and disposal requirements. Alternatively, materials may be presumed as ACMs. If the material is less than one tenth of 1%, the material is not regulated by the EPA however Cal/OSHA worker protection regulations apply if any asbestos is detected.

4.2 Lead Containing Paint/Materials

Personnel performing demolition activities that may disturb painted components or materials with concentrations of lead above the designated analytical detection limit should comply with all current Cal-OSHA regulations in order to minimize employee exposure. Cal-OSHA defines lead containing paint as a paint, which contains lead, regardless of the concentration. Currently, any proposed renovation/demolition is subject to the Cal-OSHA regulations (Title 8 CCR 1532.1 – Lead Exposure in Construction). The Cal-OSHA regulation defines specific training requirements, engineering controls and working practices for construction personnel subject to this standard.

Occupational exposure to lead occurring during construction work, including maintenance activities, painting, alteration, and repairs is subject to the Cal-OSHA Lead Exposure in Construction standard.

Construction work covered by Title 8 CCR 1532.1 includes any repair or renovation activities or other activities that disturb in-place lead-containing materials. Employers must assure that no employee will be exposed to lead at concentrations greater than 50 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) averaged over an eight-hour period without adequate protection. The Cal-OSHA Standard also establishes an action level of 30 $\mu\text{g}/\text{m}^3$ which if exceeded triggers the requirement for medical monitoring.

Proper waste stream categorization is required for the disposal of all lead containing materials and painted construction debris with total lead content that exceeds 50 ppm. The debris should be classified as hazardous waste if lead waste concentrations exceed either the total lead concentration or soluble lead concentration regulatory limits. Total lead concentration is determined by Total Threshold Limit Concentration (TTLC). Soluble or leachable lead is determined by the Soluble Threshold Limit Concentration (STLC, California required test) and/or Toxicity Characteristic Leaching Procedure (TCLP) (Federal EPA required test). Regulatory limits characterize a lead waste as a hazardous waste if lead concentrations exceed 1,000 ppm by TTLC or 5 milligram per liter by STLC or TCLP.

The above overview is not intended to be inclusive of all potentially pertinent regulatory information. The relevant EPA and OSHA standards should be consulted prior to undertaking activities involving the demolition, renovation, or maintenance of surfaces coated with lead containing paints.

4.3 PCBs - Interior / Exterior Sealants

PCBs are regulated by the EPA under 40 CFR 761. The production of PCBs has been banned since 1979 and may be present in electrical capacitors, sealants, hydraulic oils, and transformers commonly found in buildings. Materials with greater than 50 ppm PCB content are considered PCB contaminated waste while materials with greater than 500 ppm PCB are considered PCB containing.

PCB containing equipment and/or contaminated materials must be removed and disposed properly prior to demolition of a building. PCB containing lighting ballasts may be present in some lighting fixtures and must be verified by labeling. PCB containing materials must be removed and disposed during renovation or prior to building demolition.

4.4 Universal Waste

Universal wastes are common wastes with hazardous properties that must be managed and have landfill disposal restrictions. Example of universal waste include electronic devices, batteries, and mercury containing equipment or lighting. Handling, transportation, and disposal is simplified under the universal waste regulation in the California Code of Regulations Title 22, Division 4.5 Chapter 11.

All materials in the buildings meeting the definition of the universal waste that will be impacted by the renovation must be removed and handled, transported, and disposed through an appropriate vendor.

5.0 FINDINGS

5.1 Asbestos

Asbestos was identified in the building materials listed in Table I below. A complete sample summary is included as Appendix A. Laboratory analytical reports are included as Appendix B.

Table I
Asbestos Containing Materials

Material Description	Material Location	Result	NESHAP Category	Est Quantity
Building A				
HM 01 / 9" Off-White Vinyl Floor Tile with Black Mastic	Present throughout building, often beneath carpet	Off-White Floor Tile: 5% CH Black Mastic: 5% CH	Cat. I	4,200 SF
HM 03 / Perimeter Drywall with Joint Compound	Perimeter walls throughout building	By PLM analysis: Off-White Joint Compound with Paint: 2% CH Cream Tape: ND Off-White Joint Compound: 2% CH White Drywall: ND By 400-point count analysis: Drywall/Joint Compound Composite: <0.25% CH	N/A	2,900 SF
HM 05 / Black Sink Undercoating	Teacher Workroom A106 sink	2% CH	Cat. II	4 SF
HM 06 / Core Drywall with Joint Compound	Core walls and ceilings in Mechanical Room, Janitorial Closet and Restrooms	By PLM analysis: Off-White Joint Compound: 2% CH White Drywall: ND By 400-point count analysis: Drywall/Joint Compound Composite: <0.25% CH	N/A	800 SF
HM 07 / White Sink Undercoating	Assumed present at all classroom sinks	2% CH	Cat. II	20 SF
HM 15 / Partition Drywall with Joint Compound	Partition walls throughout building	By PLM analysis: Off-White Joint Compound with Paint: 2% CH Cream Tape: ND Off-White Joint Compound: 2% CH White Drywall: ND By 400-point count analysis: Drywall/Joint Compound Composite: <0.25% CH	N/A	2,400 SF
HM 16 / Black Building Sealant	Exterior at doors, windows, corners, and vertical strips at approximate 10' intervals	5% CH	Cat. II	150 LF or 15 SF

Material Description	Material Location	Result	NESHAP Category	Est Quantity
Building B				
HM 01 / Mortar and Grout associated with 4" Light Blue Ceramic Wall Tile	Girl's Restroom	Tan Texture: 2% CH* White Grout: ND Gray Grout: ND White Mortar: ND *compound associated with drywall system HM-03	N/A	350 SF
HM 03 / Perimeter Drywall with Joint Compound	Perimeter walls throughout building	By PLM analysis: White Wallpaper: ND White Joint Compound: 2% CH Cream Tape: ND White Joint Compound: 2% CH White Drywall with Brown Paper: ND By 400-point count analysis: Drywall/Joint Compound Composite: <0.25% CH	N/A	2,900 SF
HM 04 / Partition Wallboard	Partition walls throughout building	By PLM analysis: White Wallpaper: ND White Joint Compound: 2% CH Cream Tape: ND White Joint Compound: 2% CH White Drywall with Brown Paper: ND By 400-point count analysis: Drywall/Joint Compound Composite: <0.25% CH	N/A	2,400 SF
HM 06 / Mortar and Grout associated with 4" Light Green Ceramic Wall Tile	Boy's Restroom	White Grout: ND White Mortar: ND Tan Texture: 2% CH* * compound associated with drywall system HM-03	N/A	350 SF
HM 11 / 9" Off-White Vinyl Floor Tile with Black Mastic	Present throughout building, often beneath carpet	Beige Floor Tile: 3% CH Black Mastic: 2% CH	Cat. I	4,200 SF
HM 14 / Black Sink Undercoating	Teacher Workroom B106 sink	2% CH	Cat. II	4 SF
HM 15 / Core Drywall with Joint Compound	Core walls and ceilings in Mechanical Room, Janitorial Closet and Restrooms	By PLM analysis: White Joint Compound: 2% CH White Drywall with Brown Paper: ND By 400-point count analysis: Drywall/Joint Compound Composite: <0.25 - 0.25% CH	N/A	500 SF
HM 17 / Black Building Sealant	Exterior at doors, windows, corners, and vertical strips at approximate 10' intervals	5% CH	Cat. II	150 LF or 15 SF

Material Description	Material Location	Result	NESHAP Category	Est Quantity
HM 21 / White Window Caulk	At exterior window frames	By PLM analysis: Gray Caulk: < 1% CH By 400-point count analysis: Gray Caulk: <0.25% CH	N/A	800 SF
Building C				
HM 09 / 9" Off-White Vinyl Floor Tile with Black Mastic	Present throughout building, often beneath carpet	Tan Floor Tile: 3% CH Black Mastic: 5% CH	Cat. I	4,200 SF
HM 11 / Perimeter Drywall with Joint Compound	Perimeter walls throughout building	By PLM analysis: Off-White Joint Compound: 2% CH White Drywall: ND By 400-point count analysis: Drywall/Joint Compound Composite: <0.25 - 0.25% CH	N/A	2,900 SF
HM 14 / Core Drywall with Joint Compound	Core walls and ceilings in Mechanical Room, Janitorial Closet and Restrooms	By PLM analysis: White Joint Compound with Paint: 2% CH Cream Tape: ND White Joint Compound: 2% CH White Drywall: ND By 400-point count analysis: Drywall/Joint Compound Composite: <0.25 - 0.75% CH	N/A	800 SF
HM 17 / Black Sink Undercoating	Teacher Workroom C106 sink	2% CH	Cat. II	4 SF
HM 19 / Partition Drywall with Joint Compound	Partition walls throughout building	By PLM analysis: Off-White Joint Compound: 2% CH White Drywall: ND By 400-point count analysis: Drywall/Joint Compound Composite: <0.25% CH	N/A	2,400 SF
HM 22 / Black Building Sealant	Exterior at doors, windows, corners, and vertical strips at approximate 10' intervals	5% CH	Cat. II	150 LF or 15 SF
Building D				
HM 01 / Perimeter Drywall with Joint Compound	Perimeter walls throughout building	By PLM analysis: White Joint Compound: 2% CH White Drywall with Brown Paper: ND By 400-point count analysis: Drywall/Joint Compound Composite: 0.25 - <0.25% CH	N/A	2,800 SF

Material Description	Material Location	Result	NESHAP Category	Est Quantity
HM 02 / 9" Off-White Vinyl Floor Tile with Black Mastic	Present throughout classrooms beneath carpet	Off-White Floor Tile: 5% CH Black Mastic: 5% CH	Cat. I	4,200 SF
HM 05 / Black Sink Undercoating	Classroom sinks	5% CH	Cat. II	4 SF
HM 07 / Partition Drywall with Joint Compound	Partition walls throughout building	By PLM analysis: White Joint Compound: 2% CH White Drywall with Brown Paper: ND By 400-point count analysis: Drywall/Joint Compound Composite: 0.25 - <0.25% CH	N/A	2,400 SF
HM 13 / Black Building Sealant	Exterior at doors, windows, corners, and vertical strips at approximate 10' intervals	5% CH	Cat. II	150 LF
HM 14 / Black Window Gasket	At exterior window frames	<1% CH, Assumed >1% CH	Cat. II	900 SF
Building E				
HM 05 / Black Building Sealant	Exterior at doors, windows, corners, and vertical strips at approximate 10' intervals	5% CH	Cat. II	200 LF
HM 06 / 9" Off-White Vinyl Floor Tile with Black Mastic	Located throughout beneath carpet	Tan Mastic: ND Tan Floor Tile: 3% CH Black Mastic: 5% CH	Cat. II	1,050 SF
HM 12 / Black Sink Undercoating	Teacher Work Area E102 sink	2% CH	Cat. II	4 SF
HM 13 / Beige Sink Undercoating	Classroom E101 student sink	<1% CH, Assumed >1% CH	Cat. II	4 SF
HM 15 / Perimeter Drywall with Joint Compound	Perimeter walls throughout building	By PLM analysis: Off-White Joint Compound: 2% CH Cream Tape: ND White Drywall with Brown Paper: ND By 400-point count analysis: Drywall/Joint Compound Composite: <0.25 - 0.25% CH	N/A	1,200 SF

Material Description	Material Location	Result	NESHAP Category	Est Quantity
HM 16 / Partition Drywall with Joint Compound	Partition walls throughout building	By PLM analysis: White Joint Compound with Paint: 2% CH Cream Tape: ND White Joint Compound: 2% CH White Drywall: ND By 400-point count analysis: Drywall/Joint Compound Composite: <0.25% CH	N/A	450 SF
Portables				
HM 01 / Black Roofing Sealant	North Side Building F	Black Sealant: 4% CH	Cat. I	10 SF
HM 02 / Black Roofing Sealant	South Side Building G1	Black Sealant: 3% CH	Cat. I	10 SF
HM 03 / Black Roofing Sealant	South Side Building G	Black Sealant: 3% CH	Cat. I	10 SF

None Detected, CH = Chrysotile, RACM = Regulated asbestos containing material (friable), Cat. I = Non-friable (note ACM must be reclassified as a RACM if rendered friable during removal), Cat. II = Category II Non-friable (note ACM must be reclassified as a RACM if rendered friable during removal), sf = square feet, *Estimate quantity should be field verified prior to abatement or abatement design

It should be reemphasized that although reasonable efforts were made to survey accessible suspect materials, additional suspect but un-sampled materials could be located under existing building materials, inside walls, above ceilings, in isolated areas or in other concealed areas. Therefore, if suspect materials are encountered during renovation activities that do not appear to have been characterized as ACM or non-ACM, these materials must be assumed to be ACM until samples are collected and analyzed to prove otherwise. Any assumed material should be treated as asbestos or sampled to determine asbestos content before disturbing the material.

5.2 Lead Containing Paint/Materials

Terracon sampled twelve (12) painted surfaces, twelve (12) ceramics, and six (6) exterior caulks during the survey. Four (4) paints, four (4) ceramics, and five (5) caulks were reported with lead content. A summary of sample locations and analytical results is below in Table II. Samples reported with "<" is below the laboratory analytical reporting limit for the sample submitted.

Table II
Lead Containing Paint/Materials

Sample #	Material Description	Sample Location	Lead Content
Building A			
Pb-A-01	4"x4" Light Blue Ceramic Tile on Drywall Wall	Girl's Restroom A107 behind door	220 ppm

Sample #	Material Description	Sample Location	Lead Content
Pb-A-02	1"x1" Blue Ceramic Tile on Concrete Floor	Girl's Restroom A107 at drain	<39 ppm
Pb-A-03	1"x1" Green Ceramic Tile on Concrete Floor	Boy's Restroom A109 central floor	<40 ppm
Pb-A-04	4"x4" Light Green Ceramic Tile on Drywall Wall	Boy's Restroom A109 behind door	<40 ppm
Pb-A-05	Brown Paint on Metal Duct	Classroom A101 24" duct at ceiling	<39 ppm
Pb-A-06	White Paint on Wallpaper on Drywall Wall	Classroom A101 southeast corner behind door	800 ppm
Pb-A-07	Beige Paint on Wood Roof Wall	Upper lower transition wall east	<40 ppm
Pb-A-08	White Caulk associated with Metal Window Frame	Exterior window on west side of Classroom A102	61 ppm
Building B			
Pb-B-01	4"x4" Light Blue Ceramic Tile on Drywall Wall	Girl's Restroom B107 behind door	450 ppm
Pb-B-02	1"x1" Blue Ceramic Tile on Concrete Floor	Girl's Restroom B107 at drain	<40 ppm
Pb-B-03	4"x4" Light Green Ceramic Tile on Drywall Wall	Boy's Restroom B109 at entry	<40 ppm
Pb-B-04	1"x1" Green Ceramic Tile on Concrete Floor	Boy's Restroom B109 at drain	<40 ppm
Pb-B-05	Brown Paint on Metal Duct	Classroom B101 24" duct at ceiling	<39 ppm
Pb-B-06	White Paint on Wallpaper on Drywall Wall	Classroom B101 west wall	600 ppm
Pb-B-07	Beige Paint on Wood Roof Wall	Upper lower roof transition wall north	<39 ppm
Pb-B-08	White Caulk associated with Metal Window Frame	Exterior window on west side of Library B103	<39 ppm
Building C			
Pb-C-01	Beige Paint on Wood Roof Wall	Upper lower roof transition wall east	48 ppm
Pb-C-02	1"x1" Blue Ceramic Tile on Concrete Floor	Girl's Restroom C107 at drain	<39 ppm
Pb-C-03	4"x4" Light Blue Ceramic Tile on Drywall Wall	Girl's Restroom C107 at entry	64 ppm
Pb-C-04	1"x1" Green Ceramic Tile on Concrete Floor	Boy's Restroom C109 at entry	<40 ppm

Sample #	Material Description	Sample Location	Lead Content
Pb-C-05	4"x4" Light Green Ceramic Tile on Drywall Wall	Boy's Restroom C109 behind door	47 ppm
Pb-C-06	Gray Paint on Concrete Floor	Classroom C101 at south wall	<40 ppm
Pb-C-07	Brown Paint on Metal Duct	Classroom C105 duct at ceiling	<40 ppm
Pb-C-08	White Caulk associated with Metal Window Frame	Exterior window on north side of Classroom C103	370 ppm
Pb-C-09	White Paint on Wallpaper on Drywall Wall	Classroom C101 east wall by interior door	710 ppm
Building D			
Pb-D-01	White Paint on Drywall Wall	Classroom D109 by north door	<39 ppm
Pb-D-02	Beige Paint on Wood Roof Wall	East division wall	<39 ppm
Pb-D-03	White Caulk associated with Metal Window Frame	Exterior window on south side of Classroom D109	6,200 ppm
Building E			
Pb-E-01	White Caulk associated with Metal Window Frame	Exterior window on southwest side by drinking fountain	440 ppm
Pb-E-02	White Paint on Wallpaper on Drywall Wall	Classroom E101 south wall	540 ppm

ppm = parts per million

Uncharacterized paints and/or suspect materials should be assumed to contain lead until sampling and analysis prove otherwise.

5.3 PCB Containing Materials

Terracon collected twelve (12) bulk samples from multiple building sealants, caulks, and gaskets during the survey. Of the materials sampled, one (1) was reported to contain PCBs in concentrations exceeding the laboratory limit of detection. A summary of PCB sample locations and analytical results is below in Table III.

Table III
PCP Containing Materials

Sample #	Material Description	Sample Location	PCB Content
Building A			
PCB-A-01	Black Sealant	Northwest exterior corner	ND <1.0
PCB-A-02	Black Window Gasket	Northeast exterior	ND <10

Sample #	Material Description	Sample Location	PCB Content
Building B			
PCB-B-01	Black Window Gasket	Library B103 exterior window	ND <10
PCB-B-02	Black Sealant	South exterior west side	ND <10
Building C			
PCB-C-01	Black Window Gasket	Classroom C104 east exterior window	ND <10
PCB-C-02	Black Sealant	Southwest exterior corner	ND <10
Building D			
PCB-D-01	Black Sealant	East exterior	ND <10
PCB-D-02	Black Window Gasket	Classroom D109 south exterior window	ND <10
Building E			
PCB-E-01	Black Window Gasket	South center exterior window frame	5,310 mg/kg or ppm
PCB-E-02	Black Sealant	Southeast exterior	ND <10
PCB-E-03	Gray Vinyl Sheet Flooring	Southwest restroom	ND <10
Site			
PCB-S-01	Expansion Joint	Courtyard north side	ND <10

mg/kg = milligrams per kilogram, ppm = parts per million, < = less than laboratory reporting limit

5.4 Other Hazardous Building Materials

Terracon visually assessed the buildings for the presence of other hazardous materials likely to be impacted by the renovation work. Select lighting ballasts were inspected for labeling indicating the absence of PCBs. Ballasts observed in the buildings were labeled as non-PCB ballasts. All ballasts should be inspected prior to disposal to verify the presence/absence of PCBs. Ballasts should be assumed to be PCB-containing unless specified by the manufacturer's label as containing "No PCBs".

Terracon visually inspected select equipment with potential chlorofluorocarbon (CFC) or hydrochlorofluorocarbon (HCFC) refrigerants. Four (4) R-410A HVAC systems were identified on each of the roofs of Building A, Building B, and Building C. Additional HVACs are present at the campus. No testing was performed. All refrigerant systems, including those potentially in drinking fountains, on campus should be verified prior to disconnection; lubricating fluids and refrigerant must be reclaimed for recycling or destruction prior to removal of the equipment.

Emergency egress equipment was evaluated for the presence of mercury containing lighting and backup batteries that are considered universal waste. Batteries associated with the exit signs and egress lighting were identified throughout the interior of the structures. In addition, tritium gas exit signs were identified in Building B.

If tritium exit signs are removed during the renovation work, they must be transported to an approved waste vendor, manufacturer, or distributor for proper disposal. The owner must send required notice of disposal to the National Regulatory Commission (NRC) or State within thirty (30) days of removal/disposal.

6.0 LIMITATIONS/GENERAL COMMENTS

Terracon performed limited destructive testing such as knocking holes in walls, dismantling of equipment or removal of protective coverings during the survey. Uncharacterized hidden materials may exist under existing finishes, equipment, or structural materials.

This hazardous materials survey was conducted in a manner consistent with the level of care and skill ordinarily exercised by members of the profession currently practicing under similar conditions in the same locale. The results, findings, conclusions, and recommendations expressed in this report are based on conditions observed during our survey at the subject site. The information contained in this report is relevant to the date on which this survey was performed and should not be relied upon to represent conditions at a later date.

This report has been prepared on behalf of and exclusively for use by LUSD for specific application to their project as discussed. This report is not a bidding document. Contractors or consultants reviewing this report must draw their own conclusions regarding further investigation or remediation deemed necessary. Terracon does not warrant the work of regulatory agencies, laboratories or other third parties supplying information which may have been used in the preparation of this report. No warranty, express or implied is made.

APPENDIX A
PRE-RENOVATION HAZARDOUS MATERIALS SURVEY
1100 North Ham Lane
Lodi, California

Terracon Project No. NA227079
November 28, 2022

ASBESTOS SAMPLE SUMMARY

HM #	Material Description	Sample #	Sample Location	Result	NESHAP Category	Condition
Building A						
1	9" Off-White Vinyl Floor Tile with Black Mastic	A-1A	Classroom A102 Southwest Corner	Off-White Floor Tile: 5% CH Black Mastic: 5% CH	Cat. I	Good
		A-1B	Classroom A104 Northeast Corner	Off-White Floor Tile: 5% CH Black Mastic: 5% CH		
		A-1C	Teacher Workroom A106 North Side	Off-White Floor Tile: 5% CH Black Mastic: 5% CH		
2	4" Blue Cove with Brown and White Glue	A-2A	Classroom A102 Southwest Corner	ND	N/A	Good
		A-2B	Classroom A104 Northeast Corner	ND		
		A-2C	Teacher Workroom A106 North Side	ND		
3	Perimeter Drywall with Joint Compound	A-3A	Classroom A102 Southwest Corner	<i>By PLM analysis:</i> Off-White Joint Compound with Paint: 2% CH Cream Tape: ND Off-White Joint Compound: 2% CH White Drywall: ND <i>By 400-point count analysis:</i> Drywall/Joint Compound Composite: <0.25% CH	N/A	Good

HM #	Material Description	Sample #	Sample Location	Result	NESHAP Category	Condition
		A-3B	Classroom A104 Southeast Door	<i>By PLM analysis:</i> Off-White Joint Compound: 2% CH White Drywall: ND <i>By 400-point count analysis:</i> Drywall/Joint Compound Composite: <0.25% CH		
		A-3C	Mechanical Room A111 Northeast Corner	<i>By PLM analysis:</i> Off-White Joint Compound with Paint: 2% CH Cream Tape: ND Off-White Joint Compound: 2% CH White Drywall: ND <i>By 400-point count analysis:</i> Drywall/Joint Compound Composite: <0.25% CH		
4	1x2 Acoustical Ceiling Tile (Nailed In)	A-4A	Teacher Workroom A106 Southeast Corner	ND	N/A	Good
		A-4B	Classroom A102 South Ceiling	ND		
		A-4C	Classroom A101 North Ceiling	ND		
5	Black Sink Undercoating	A-5A	Teacher Workroom A106 Sink	2% CH	Cat. II	Good
		A-5B	Teacher Workroom A106 Sink	2% CH		
6	Core Drywall with Joint Compound	A-6A	Mechanical Room A111 Center Ceiling	<i>By PLM analysis:</i> Off-White Joint Compound: 2% CH White Drywall: ND <i>By 400-point count analysis:</i> Drywall/Joint Compound Composite: <0.25% CH	N/A	Good

HM #	Material Description	Sample #	Sample Location	Result	NESHAP Category	Condition
		A-6B	Janitorial Closet A108 Northeast Corner	<i>By PLM analysis:</i> Off-White Joint Compound: 2% CH White Drywall: ND <i>By 400-point count analysis:</i> Drywall/Joint Compound Composite: <0.25% CH		
		A-6C	Girl's Restroom A109 Ceiling at Entry	<i>By PLM analysis:</i> Off-White Joint Compound with Paint: 2% CH Cream Tape: ND Off-White Joint Compound: 2% CH White Drywall: ND <i>By 400-point count analysis:</i> Drywall/Joint Compound Composite: <0.25% CH		
7	White Sink Undercoating	A-7A	Classroom A103 Sink	2% CH	Cat. II	Good
		A-7B	Classroom A102 Sink	2% CH		
		A-7C	Classroom A104 Sink	2% CH		
8	Gray Duct Putty	A-8A	Mechanical Room A111 Center 24" Square Duct	ND	N/A	Good
		A-8B	Mechanical Room A111 Center 24" Square Duct	ND		
		A-8C	Classroom A102 Overhead Duct	ND		
9	White Duct Mastic	A-9A	Mechanical Room A111 Central 4" Round Duct	ND	N/A	Good
		A-9B	Mechanical Room A111 Central 4" Round Duct	ND		

HM #	Material Description	Sample #	Sample Location	Result	NESHAP Category	Condition
10	Yellow Carpet Adhesive	A-10A	Classroom A101 Northeast Corner	ND	N/A	Good
		A-10B	Classroom A103 Northwest Center Floor	ND		
		A-10C	Hall A110 Southeast Corner	ND		
11	Mortar and Grout associated with 4" Light Blue Ceramic Wall Tile	A-11A	Girl's Restroom A107 behind Door	ND	N/A	Good
		A-11B	Girl's Restroom A107 behind Door	ND		
12	Mortar and Grout associated with 1" Blue Ceramic Floor Tile	A-12A	Girl's Restroom A107 at Drain	ND	N/A	Good
		A-12B	Girl's Restroom A107 at Drain	ND		
13	Mortar and Grout associated with 1" Green Ceramic Floor Tile	A-13A	Boy's Restroom A109 Central Floor	ND	N/A	Good
		A-13B	Boy's Restroom A109 Central Floor	ND		
14	Mortar and Grout associated with 4" Light Green Ceramic Wall Tile	A-14A	Boy's Restroom A109 behind Door	ND	N/A	Good
		A-14B	Boy's Restroom A109 behind Door	ND		
15	Partition Drywall with Joint Compound	A-15A	Classroom A103 Southeast at Door	<p><i>By PLM analysis:</i> Off-White Joint Compound with Paint: 2% CH Cream Tape: ND Off-White Joint Compound: 2% CH White Drywall: ND</p> <p><i>By 400-point count analysis:</i> Drywall/Joint Compound Composite: <0.25% CH</p>	N/A	Good

HM #	Material Description	Sample #	Sample Location	Result	NESHAP Category	Condition
		A-15B	Classroom A101 Southeast behind Door	<i>By PLM analysis:</i> Off-White Joint Compound with Paint: 2% CH Cream Tape: ND Off-White Joint Compound: 2% CH White Drywall: ND <i>By 400-point count analysis:</i> Drywall/Joint Compound Composite: <0.25% CH		
		A-15C	Classroom A103 Southwest at Door	<i>By PLM analysis:</i> Off-White Joint Compound with Paint: 2% CH Cream Tape: ND Off-White Joint Compound: 2% CH White Drywall: ND <i>By 400-point count analysis:</i> Drywall/Joint Compound Composite: <0.25% CH		
16	Black Building Sealant	A-16A	South Exterior	5% CH	Cat. II	Good
		A-16B	Southwest Exterior Corner	5% CH		
		A-16C	Northeast Exterior Corner	5% CH		
17	Black Window Gasket	A-17A	South Side Exterior West	ND	N/A	Good
		A-17B	Northeast Exterior	ND		
		A-17C	South Side Exterior East	ND		

HM #	Material Description	Sample #	Sample Location	Result	NESHAP Category	Condition
18	Main Rolled Roofing Field with Insulation	A-18A	Raised Roof Northeast Sided	ND	N/A	Good
		A-18B	Southeast Awning	ND		
		A-18C	Lower Roof West Side	ND		
19	Rolled Roof Curb	A-19A	Upper Roof Vent North of Center	ND	N/A	Good
		A-19B	Southeast HVAC Unit AC-A1 Lower Roof	ND		
		A-19C	West Lower Roof Vent	ND		
20	Black Penetration Mastic	A-20A	Northeast Upper Pipe Penetration	ND	N/A	Good
		A-20B	Lower Roof Southeast Pipe Penetration	ND		
		A-20C	Northeast Lower Roof Vent Penetration	ND		
21	White Window Caulk	S-21A	Classroom A104 East Exterior Window	ND	N/A	Good
		S-21B	Classroom A104 East Exterior Window	ND		
		S-21C	Classroom A102 West Exterior Window	ND		
22	White Paint on Wallpaper on Drywall Wall	22-Pb-A-06	Classroom A101 Southeast Corner behind Door	ND	N/A	Good
23	Beige Paint on Wood Roof Wall	23-Pb-A-07	Upper Lower Transition Wall East	ND	N/A	Good

HM #	Material Description	Sample #	Sample Location	Result	NESHAP Category	Condition
Building B						
1	Mortar and Grout associated with 4" Light Blue Ceramic Wall Tile	B-1A	Girl's Restroom B107 behind Door	Tan Texture: 2% CH Gray Grout: ND White Mortar: ND	NA See HA# 3 and 4	Good
		B-1B	Girl's Restroom B107 behind Door	Tan Texture: 2% CH White Grout: ND Gray Grout: ND White Mortar: ND		
2	1x2 Acoustical Ceiling Tile (Nailed In)	B-2A	Classroom B104 East Ceiling	ND	N/A	Good
		B-2B	Classroom B101 East Ceiling	ND		
3	Perimeter Drywall with Joint Compound	B-3A	Classroom B105 Southeast Corner	White Drywall with Brown Paper: ND	N/A	Good
		B-3B	Classroom B102 Northeast Corner Wall	<i>By PLM analysis:</i> White Wallpaper: ND White Joint Compound: 2% CH Cream Tape: ND White Joint Compound: 2% CH White Drywall with Brown Paper: ND <i>By 400-point count analysis:</i> Drywall/Joint Compound Composite: <0.25% CH		
		B-3C	Library B103 West Wall	<i>By PLM analysis:</i> White Wallpaper: ND White Joint Compound: 2% CH Cream Tape: ND White Joint Compound: 2% CH White Drywall with Brown Paper: ND <i>By 400-point count analysis:</i> Drywall/Joint Compound Composite: <0.25% CH		

HM #	Material Description	Sample #	Sample Location	Result	NESHAP Category	Condition
4	Partition Wallboard	B-4A	Classroom B105 Northwest Corner	<i>By PLM analysis:</i> White Wallpaper: ND White Joint Compound: 2% CH Cream Tape: ND White Joint Compound: 2% CH White Drywall with Brown Paper: ND <i>By 400-point count analysis:</i> Drywall/Joint Compound Composite: <0.25% CH	N/A	Good
		B-4B	Classroom B102 Northeast Corner Wall	<i>By PLM analysis:</i> White Wallpaper: ND White Joint Compound: 2% CH Cream Tape: ND White Joint Compound: 2% CH White Drywall with Brown Paper: ND <i>By 400-point count analysis:</i> Drywall/Joint Compound Composite: <0.25% CH		
		B-4C	Library B103 South Wall	<i>By PLM analysis:</i> White Wallpaper: ND White Joint Compound: 2% CH Cream Tape: ND White Joint Compound: 2% CH White Drywall with Brown Paper: ND <i>By 400-point count analysis:</i> Drywall/Joint Compound Composite: <0.25% CH		
5	Mortar and Grout associated with 1" Blue Ceramic Floor Tile	B-5A	Girl's Restroom B107 at Drain	ND	N/A	Good
		B-5B	Girl's Restroom B107 at Drain	ND		

HM #	Material Description	Sample #	Sample Location	Result	NESHAP Category	Condition
6	Mortar and Grout associated with 4" Light Green Ceramic Wall Tile	B-6A	Boy's Restroom B109 at Entry	White Grout: ND White Mortar: ND Tan Texture: 2% CH	NA See HA# 3 and 4	Good
		B-6B	Boy's Restroom B109 at Entry	White Grout: ND White Mortar: ND Tan Texture: 2% CH		
7	Base Cove with Yellow and Brown Mastic	B-7A	Classroom B105 Southeast Corner Wall	ND	N/A	Good
		B-7B	Classroom B102 Northeast Corner	ND		
		B-7C	Library B103 South Wall	ND		
8	Mortar and Grout associated with 1" Green Ceramic Floor Tile	B-8A	Boy's Restroom B109 at Drain	ND	N/A	Good
		B-8B	Boy's Restroom B109 at Drain	ND		
9	Gray Duct Putty	B-9A	Mechanical Room B111 Central 24" Duct	ND	N/A	Good
		B-9B	Mechanical Room B111 Central 24" Duct	ND		
		B-9C	Classroom B101 24" Sealing Duct	ND		
10	White Duct Sealant	B-10A	East Exterior 24" Duct	ND	N/A	Good
		B-10B	East Exterior 24" Duct	ND		
		B-10C	Mechanical Room B111 4" Round Duct	ND		
11	9" Off-White Vinyl Floor Tile with Black Mastic	B-11A	Classroom B101 Southwest Corner	Beige Floor Tile: 3% CH Black Mastic: 2% CH	Cat. I	Good
		B-11B	Classroom B105 Southeast Corner	Beige Floor Tile: 3% CH Black Mastic: 2% CH		

HM #	Material Description	Sample #	Sample Location	Result	NESHAP Category	Condition
		B-11C	Classroom B101 Northeast Corner	Beige Floor Tile: 3% CH Black Mastic: 2% CH		
12	Yellow Carpet Glue	B-12A	Classroom B101 Southwest Corner	ND	N/A	Good
		B-12B	Classroom B105 Southeast Corner	ND		
		B-12C	Library B103 Southeast Corner	ND		
13	White Sink Undercoating	B-13A	Classroom B105 Sink	ND	N/A	Good
		B-13B	Classroom B102 Sink	ND		
		B-13C	Classroom B101 Southeast Sink	ND		
14	Black Sink Undercoating	B-14A	Teacher Workroom B106 Sink	2% CH	Cat. II	Good
		B-14B	Teacher Workroom B106 Sink	2% CH		
15	Core Drywall with Joint Compound	B-15A	Janitorial Closet Southeast Corner	<i>By PLM analysis:</i> White Joint Compound: 2% CH White Drywall with Brown Paper: ND <i>By 400-point count analysis:</i> Drywall/Joint Compound Composite: 0.25% CH	N/A	Good
		B-15B	B111 Ceiling at Entry	<i>By PLM analysis:</i> White Joint Compound: 2% CH White Drywall with Brown Paper: ND <i>By 400-point count analysis:</i> Drywall/Joint Compound Composite: 0.25% CH		

HM #	Material Description	Sample #	Sample Location	Result	NESHAP Category	Condition
		B-15C	B109 Ceiling at Entry	<i>By PLM analysis:</i> White Joint Compound: 2% CH White Drywall with Brown Paper: ND <i>By 400-point count analysis:</i> Drywall/Joint Compound Composite: <0.25% CH		
16	Black Window Gasket	B-16A	Library B103 Exterior Window	ND	N/A	Good
		B-16B	Classroom B101 Exterior Window	ND		
		B-16C	Classroom B105 Exterior Window	ND		
17	Black Building Sealant	B-17A	Northeast Exterior Corner	5% CH	Cat. II	Good
		B-17B	East Side	5% CH		
		B-17C	Southeast Exterior Corner	5% CH		
18	Main Rolled Roof Field	B-18A	Upper Roof Center	ND	N/A	Good
		B-18B	Lower Roof North Side	ND		
		B-18C	Awning Southwest	ND		
19	Rolled Roof Curb	B-19A	Upper Roof East Vent Penetration	ND	N/A	Good
		B-19B	Northwest HVAC Unit	ND		
		B-19C	Pipe Sleeper Curb South Side	ND		

HM #	Material Description	Sample #	Sample Location	Result	NESHAP Category	Condition
20	Black Penetration Mastic	B-20A	Upper Roof Northeast Pipe Insulation	ND	N/A	Good
		B-20B	Upper Roof Northwest Side Pipe Insulation	ND		
		B-20C	Southeast Pipe Penetration	ND		
21	White Window Caulk	B-21A	Library B103 West Exterior Window	Gray Caulk: ND	N/A	Good
		B-21B	Classroom B101 North Exterior Window	Gray Caulk: ND		
		B-21C	Classroom B101 North Exterior Window	By PLM analysis: Gray Caulk: < 1% CH By 400-point count analysis: Gray Caulk: <0.25% CH		
22	White Paint on Wallpaper on Drywall Wall	22-Pb-B-06	Classroom B101 West Wall	ND	N/A	Good
23	Beige Paint on Wood Roof Wall	23-Pb-B-07	Upper Lower Roof Transition Wall North	ND	N/A	Good
Building C						
1	Main Rolled Roof Field	C-1A	Upper Roof Center	ND	N/A	Good
		C-1B	Lower Roof East Side	ND		
		C-1C	Awning Northwest Side	ND		
2	Rolled Roof Curb	C-2A	Upper Roof South Vent	ND	N/A	Good
		C-2B	Lower Roof East Vent	ND		

HM #	Material Description	Sample #	Sample Location	Result	NESHAP Category	Condition
		C-2C	Lower Roof Northwest Vent	ND		
3	Black Penetration Mastic	C-3A	Upper Roof Southeast Penetration Pipe	ND	N/A	Good
		C-3B	Lower Roof Southeast Penetration Pipe	ND		
		C-3C	Lower Roof Southwest Penetration Pipe	ND		
4	Mortar and Grout associated with 1" Light Blue Ceramic Wall Tile	C-4A	Girl's Restroom C107 at Drain	ND	N/A	Good
		C-4B	Girl's Restroom C107 at Drain	ND		
5	Mortar and Grout associated with 4" Light Blue Ceramic Wall Tile	C-5A	Girl's Restroom C107 by Entry	ND	N/A	Good
		C-5B	Girl's Restroom C107 by Entry	ND		
6	Mortar and Grout associated with 1" Green Ceramic Floor Tile	C-6A	Boy's Restroom C109 at Entry	ND	N/A	Good
		C-6B	Boy's Restroom C109 at Entry	ND		
7	Mortar and Grout associated with 4" Light Green Ceramic Wall Tile	C-7A	Boy's Restroom C109 behind Door	ND	N/A	Good
		C-7B	Boy's Restroom C109 behind Door	ND		
8	Gray Vinyl Sheet with Burlap and Yellow Glue	C-8A	Classroom C101 Southwest Corner	ND	N/A	Good
		C-8B	Classroom C101 Southwest Corner	ND		
		C-8C	Classroom C101 South Wall	ND		

HM #	Material Description	Sample #	Sample Location	Result	NESHAP Category	Condition
9	9" Off-White Vinyl Floor Tile with Black Mastic	C-9A	Classroom C101 North Wall	Tan Floor Tile: 3% CH Black Mastic: 5% CH	Cat. I	Good
		C-9B	Classroom C103 Southeast Corner	Tan Floor Tile: 3% CH Black Mastic: 5% CH		
		C-9C	Classroom C104 Northeast Corner	Tan Floor Tile: 3% CH Black Mastic: 5% CH		
10	Yellow Carpet Adhesive	C-10A	Classroom C101 North Wall	ND	N/A	Good
		C-10B	Classroom C104 Northeast Corner	ND		
		C-10C	Classroom C102 North Wall	ND		
11	Perimeter Drywall with Joint Compound	C-11A	Classroom C101 Southwest Door	<i>By PLM analysis:</i> Off-White Joint Compound: 2% CH White Drywall: ND <i>By 400-point count analysis:</i> Drywall/Joint Compound Composite: <0.25% CH	N/A	Good
		C-11B	Classroom C104 Northeast Door	<i>By PLM analysis:</i> Off-White Joint Compound: 2% CH White Drywall: ND <i>By 400-point count analysis:</i> Drywall/Joint Compound Composite: 0.25% CH		
		C-11C	Classroom C105 Southeast Door	<i>By PLM analysis:</i> Off-White Joint Compound: 2% CH Tan Adhesive: ND White Drywall: ND <i>By 400-point count analysis:</i> Drywall/Joint Compound Composite: <0.25% CH		

HM #	Material Description	Sample #	Sample Location	Result	NESHAP Category	Condition
12	4" Cove Base with Brown Glue	C-12A	Classroom C101 Southwest Door	ND	N/A	Good
		C-12B	Classroom C104 Northeast Door	ND		
		C-12C	Classroom C103 Northwest Door	ND		
13	White Sink Undercoating	C-13A	Classroom C101 Sink	ND	N/A	Good
		C-13B	Classroom C104 Sink	ND		
		C-13C	Classroom C105 Sink	ND		
14	Core Drywall with Joint Compound	C-14A	Janitorial Closet C108	<i>By PLM analysis:</i> White Joint Compound with Paint: 2% CH Cream Tape: ND White Joint Compound: 2% CH White Drywall: ND <i>By 400-point count analysis:</i> Drywall/Joint Compound Composite: 0.75% CH	N/A	Good
		C-14B	Mechanical Room C111 Ceiling	<i>By PLM analysis:</i> White Joint Compound with Paint: 2% CH Cream Tape: ND White Joint Compound: 2% CH White Drywall: ND <i>By 400-point count analysis:</i> Drywall/Joint Compound Composite: <0.25% CH		

HM #	Material Description	Sample #	Sample Location	Result	NESHAP Category	Condition
		C-14C	Mechanical Room C111 Ceiling	<i>By PLM analysis:</i> White Joint Compound with Paint: 2% CH Cream Tape: ND White Joint Compound: 2% CH White Drywall: ND <i>By 400-point count analysis:</i> Drywall/Joint Compound Composite: 0.25% CH		
15	Gray Duct Putty Tape	C-15A	Mechanical Room C111	ND	N/A	Good
		C-15B	Mechanical Room C111	ND		
		C-15C	South Exterior HVAC Duct	ND		
16	White Duct Sealant	C-16A	South Exterior HVAC Duct	ND	N/A	Good
		C-16B	South Exterior HVAC Duct	ND		
		C-16C	Mechanical Room C111 Round Duct	ND		
17	Black Sink Undercoating	C-17A	Teacher Workroom C106 Sink	2% CH	Cat. II	Good
		C-17B	Teacher Workroom C106 Sink	2% CH		
18	1x2 Acoustic Ceiling Tile	C-18A	Teacher Workroom C106	ND	N/A	Good
		C-18B	Hallway C110 outside Girl's Restroom C107	ND		

HM #	Material Description	Sample #	Sample Location	Result	NESHAP Category	Condition
19	Partition Drywall with Joint Compound	C-19A	Classroom C103 Entry to Room Classroom C101	<i>By PLM analysis:</i> Off-White Joint Compound: 2% CH White Drywall: ND <i>By 400-point count analysis:</i> Drywall/Joint Compound Composite: <0.25% CH	N/A	Good
		C-19B	Classroom C103.1 Entry to Room Classroom C105	<i>By PLM analysis:</i> Off-White Joint Compound: 2% CH White Drywall: ND <i>By 400-point count analysis:</i> Drywall/Joint Compound Composite: <0.25% CH		
		C-19C	Classroom C103.1 North Entry Door	<i>By PLM analysis:</i> Off-White Joint Compound: 2% CH White Drywall: ND <i>By 400-point count analysis:</i> Drywall/Joint Compound Composite: <0.25% CH		
20	Black Window Gasket	C-20A	Classroom C103 North Exterior Windows	ND	N/A	Good
		C-20B	Classroom C104 East Exterior Windows	ND		
		C-20C	Classroom C102 West Exterior Windows	ND		
21	White Window Caulk	C-21A	Classroom C103 North Exterior Window	ND	N/A	Good
		C-21B	Classroom C104 East Exterior Window	ND		
		C-21C	Classroom C102 West Exterior Window	ND		

HM #	Material Description	Sample #	Sample Location	Result	NESHAP Category	Condition
22	Black Building Sealant	C-22A	Southwest Exterior Corner	5% CH	Cat. II	Good
		C-22B	Southeast Exterior Corner	5% CH		
		C-22C	South Exterior	5% CH		
23	Beige Paint on Wood Roof Wall	23-Pb-C-01	Upper Lower Wall Transition Wall East	ND	N/A	Good
24	White Paint on Wallpaper on Drywall Wall	24-Pb-C-09	Classroom C101 East Wall by Door	ND	N/A	Good
Building D						
1	Perimeter Drywall with Joint Compound	D-1A	Classroom D115 Northwest Corner	<i>By PLM analysis:</i> White Joint Compound: 2% CH White Drywall with Brown Paper: ND <i>By 400-point count analysis:</i> Drywall/Joint Compound Composite: <0.25% CH	N/A	Good
		D-1B	Classroom D116 Back Door (North Door)	<i>By PLM analysis:</i> White Joint Compound: 2% CH White Drywall with Brown Paper: ND <i>By 400-point count analysis:</i> Drywall/Joint Compound Composite: <0.25% CH		
		D-1C	Classroom D108 South Door	<i>By PLM analysis:</i> White Joint Compound: 2% CH White Drywall with Brown Paper: ND <i>By 400-point count analysis:</i> Drywall/Joint Compound Composite: 0.25% CH		

HM #	Material Description	Sample #	Sample Location	Result	NESHAP Category	Condition
2	9" Off-White Vinyl Floor Tile with Black Mastic	D-2A	Classroom D115 Northwest Corner	Off-White Floor Tile: 5% CH Black Mastic: 5% CH	Cat. I	Good
		D-2B	Classroom D109 Northwest Corner	Off-White Floor Tile: 5% CH Black Mastic: 5% CH		
		D-2C	Classroom D109 Northeast Corner	Off-White Floor Tile: 5% CH Black Mastic: 5% CH		
3	4" Vinyl Cove Base with Brown and White Glue	D-3A	Classroom D115 Northwest Corner	ND	N/A	Good
		D-3B	Classroom D116 Southeast Corner	ND		
		D-3C	Classroom D108 South Door	ND		
4	Yellow Carpet Glue	D-4A	Classroom D115 Northwest Corner	ND	N/A	Good
		D-4B	Classroom D116 Southeast Corner	ND		
		D-4C	Classroom D108 Northeast Corner	ND		
5	Black Sink Undercoating	D-5A	Classroom D115 Sink	5% CH	Cat. II	Good
		D-5B	Classroom D116 Sink	5% CH		
		D-5C	Classroom D108 Sink	5% CH		
6	1x2 Acoustic Ceiling Tile	D-6A	Classroom D115 Northwest Ceiling	ND	N/A	Good
		D-6B	Classroom D116 Southwest Ceiling	ND		
		D-6C	Classroom D109 East Side	ND		

HM #	Material Description	Sample #	Sample Location	Result	NESHAP Category	Condition
7	Partition Drywall with Joint Compound	D-7A	Classroom D116 Southeast Corner	<i>By PLM analysis:</i> White Joint Compound: 2% CH White Drywall with Brown Paper: ND <i>By 400-point count analysis:</i> Drywall/Joint Compound Composite: <0.25% CH	N/A	Good
		D-7B	Classroom D109 West Wall at Southwest Corner	<i>By PLM analysis:</i> White Joint Compound: 2% CH White Drywall with Brown Paper: ND <i>By 400-point count analysis:</i> Drywall/Joint Compound Composite: 0.25% CH		
		D-7C	Classroom D115 West Wall North Side	<i>By PLM analysis:</i> White Joint Compound: 2% CH White Drywall with Brown Paper: ND <i>By 400-point count analysis:</i> Drywall/Joint Compound Composite: <0.25% CH		
8	Main Rolled Roof Field	D-8A	Upper Roof Center	ND	N/A	Good
		D-8B	Awning East Side	ND		
		D-8C	West Side Lower Roof	ND		
9	Rolled Roof Curb	D-9A	Upper Roof North Vent	ND	N/A	Good
		D-9B	Lower Roof East Side Vent	ND		
		D-9C	Southwest Lower Roof	ND		

HM #	Material Description	Sample #	Sample Location	Result	NESHAP Category	Condition
10	Black Penetration Mastic	D-10A	Lower Roof East Penetration Pipe	ND	N/A	Good
		D-10B	Lower Roof East Penetration Pipe	ND		
		D-10C	Southwest Lower Roof	ND		
11	White Roof Coating Patch	D-11A	Northwest Patch North	ND	N/A	Good
		D-11B	Northwest Patch Center	ND		
		D-11C	Northwest Patch South	ND		
12	White Window Caulk	D-12A	South Window Classroom D109	ND	N/A	Good
		D-12B	Southeast Window Classroom D108	ND		
		D-12C	Southwest Window Classroom D108	ND		
13	Black Building Sealant	D-13A	East Exterior	5% CH	Cat. II	Good
		D-13B	Southeast Exterior Corner	5% CH		
		D-13C	South Exterior	5% CH		
14	Black Window Gasket	D-14A	Classroom D109 South Exterior Window	<1% CH	Cat. II	Good
		D-14B	Classroom D109 South Exterior Window	<1% CH		
		D-14C	Classroom D108 South Exterior Window	<1% CH		

HM #	Material Description	Sample #	Sample Location	Result	NESHAP Category	Condition
15	White Paint on Drywall Wall	15-Pb-D-01	Classroom D109 by North Door	ND	N/A	Good
16	Beige Paint on Wood Roof Wall	16-Pb-D-02	East Division Wall	ND	N/A	Good
Building E						
1	Main Rolled Roof Field	E-1A	South Awning	ND	N/A	Good
		E-1B	East Main Roof	ND		
		E-1C	West Main Roof	ND		
2	Black Penetration Mastic	E-2A	Northwest Pipe Penetration	ND	N/A	Good
		E-2B	Southwest Pipe Penetration	ND		
3	Black Window Gasket	E-3A	Southeast Exterior Window	ND	N/A	Good
		E-3B	Southwest Center Exterior Window	ND		
		E-3C	Northwest Exterior Windows	ND		
4	White Window Caulk	E-4A	South Exterior Window East	ND	N/A	Good
		E-4B	South Exterior Window Center	ND		
		E-4C	Southwest Exterior Near Drinking Fountain	ND		

HM #	Material Description	Sample #	Sample Location	Result	NESHAP Category	Condition
5	Black Building Sealant	E-5A	Southwest Exterior	5% CH	Cat. II	Good
		E-5B	Southwest Exterior	5% CH		
		E-5C	Southeast Exterior	5% CH		
6	9" Off-White Vinyl Floor Tile with Black Mastic	E-6A	Classroom E101 Northwest	Tan Mastic: ND Tan Floor Tile: 3% CH Black Mastic: 5% CH	Cat. I	Good
		E-6B	Classroom E101 Center	Tan Mastic: ND Tan Floor Tile: 3% CH Black Mastic: 5% CH		
		E-6C	Classroom E101 Southeast	Tan Mastic: ND Tan Floor Tile: 3% CH Black Mastic: 5% CH		
7	Yellow Carpet Adhesive	E-7A	Classroom E101 Northwest	ND	N/A	Good
		E-7B	Classroom E101 Center	ND		
		E-7C	Classroom E101 Southeast	ND		
8	Gray Vinyl Sheet Flooring with Burlap and Adhesive	E-8A	Student Restroom E104 South Side	ND	N/A	Good
		E-8B	Student Restroom E104 South Side	ND		
		E-8C	Student Restroom E104 South Side	ND		
9	Yellow Wainscot Adhesive	E-9A	Student Restroom E104 West Wall	ND	N/A	Good
		E-9B	Student Restroom E104 West Wall	ND		

HM #	Material Description	Sample #	Sample Location	Result	NESHAP Category	Condition
10	Concrete Pad	E-10A	South Side Patio East	ND	N/A	Good
		E-10B	South Side Patio East	ND		
		E-10C	South Side Patio West	ND		
11	Asphalt	E-11A	South Side Playground West	ND	N/A	Good
		E-11B	South Side Playground Center	ND		
		E-11C	South Side Playground East	ND		
12	Black Sink Undercoating	E-12A	Teacher Work Area E102 Sink	2% CH	Cat. II	Good
		E-12B	Teacher Work Area E102 Sink	2% CH		
13	Beige Sink Undercoating	E-13A	Classroom E101 Student Sink	<1% CH	Cat. II	Good
		E-13B	Classroom E101 Student Sink	<1% CH		
14	4" Cove with Brown and White Glue	E-14A	Classroom E101 Southeast Corner	ND	N/A	Good
		E-14B	Classroom E101 North Door	ND		
		E-14C	Classroom E101 Southeast near Restroom Door	ND		

HM #	Material Description	Sample #	Sample Location	Result	NESHAP Category	Condition
15	Perimeter Drywall with Joint Compound	E-15A	Classroom E101 South Wall East Corner	<i>By PLM analysis:</i> Off-White Joint Compound: 2% CH Cream Tape: ND White Drywall with Brown Paper: ND <i>By 400-point count analysis:</i> Drywall/Joint Compound Composite: 0.25% CH	N/A	Good
		E-15B	Classroom E101 East Wall South Corner	<i>By PLM analysis:</i> Off-White Joint Compound: 2% CH Cream Tape: ND White Drywall with Brown Paper: ND <i>By 400-point count analysis:</i> Drywall/Joint Compound Composite: 0.25% CH		
		E-15C	Classroom E101 Northwest Door	<i>By PLM analysis:</i> Off-White Joint Compound: 2% CH Cream Tape: ND White Drywall with Brown Paper: ND <i>By 400-point count analysis:</i> Drywall/Joint Compound Composite: <0.25% CH		
16	Partition Drywall with Joint Compound	E-16A	Mechanical Room E103 South Wall	<i>By PLM analysis:</i> White Joint Compound with Paint: 2% CH Cream Tape: ND White Joint Compound: 2% CH White Drywall: ND <i>By 400-point count analysis:</i> Drywall/Joint Compound Composite: <0.25% CH	N/A	Good

HM #	Material Description	Sample #	Sample Location	Result	NESHAP Category	Condition
		E-16B	Mechanical Room E103 East Wall	<i>By PLM analysis:</i> White Joint Compound with Paint: 2% CH Cream Tape: ND White Joint Compound: 2% CH White Drywall: ND <i>By 400-point count analysis:</i> Drywall/Joint Compound Composite: <0.25% CH		
17	1x2 Acoustical Ceiling Tile (Nailed In)	E-17A	Teacher Work Area E102 Sink Ceiling	ND	N/A	Good
		E-17B	Classroom E101 Student Sink Ceiling	ND		
		E-17C	South Exit Door	ND		
18	Concrete Slab	E-18A	Southwest Slab	ND	N/A	Good
		E-18B	Southwest Slab	ND		
		E-18C	Southwest Slab	ND		
19	White Paint on Wallpaper on Drywall Wall	19-Pb-E-02	Classroom E101 South Wall	ND	N/A	Good
Portables						
1	Black Roofing Sealant	P-01A	North Side Building F	Black Sealant: 4% CH	Cat. I	Good
		P-01B	North Side Building F	Black Sealant: 4% CH		
		P-01C	North Side Building F	Black Sealant: 4% CH		

HM #	Material Description	Sample #	Sample Location	Result	NESHAP Category	Condition
2	Black Roofing Sealant	P-02A	South Side Building G1	Black Sealant: 3% CH	Cat. I	Good
		P-02B	South Side Building G1	Black Sealant: 3% CH		
		P-02C	South Side Building G1	Black Sealant: 3% CH		
3	Black Roofing Sealant	P-03A	South Side Building G	Black Sealant: 3% CH	Cat. I	Good
		P-03B	South Side Building G	Black Sealant: 3% CH		
		P-03C	South Side Building G	Black Sealant: 3% CH		
Site						
1	Smooth White Concrete	S-1A	Courtyard West	ND	N/A	Good
		S-1B	Courtyard West	ND		
		S-1C	North of Building D	ND		
2	Exposed Aggregate Concrete	S-2A	North Courtyard	ND	N/A	Good
		S-2B	Center Courtyard	ND		
		S-2C	South Courtyard	ND		
3	Asphalt	S-3A	Northeast Area at Southeast Side	ND	N/A	Good
		S-3B	Northeast Area at Center	ND		
		S-3C	Northeast Area at Northwest Side	ND		

HM #	Material Description	Sample #	Sample Location	Result	NESHAP Category	Condition
4	Asphalt	S-4A	Northwest Parking Lot South Side	ND	N/A	Good
		S-4B	Northwest Parking Lot Center	ND		
		S-4C	Northwest Parking Lot North	ND		
5	Asphalt	S-5A	South Area at West Side	ND	N/A	Good
		S-5B	South Area at Center	ND		
		S-5C	South Area at East Side	ND		
6	Coarse Concrete	S-6A	Courtyard East	ND	N/A	Good
		S-6B	Courtyard South	ND		
		S-6C	Courtyard North	ND		
7	Expansion Joint	S-7A	Courtyard North Side	ND	N/A	Good
		S-7B	Courtyard North Side	ND		
		S-7C	Courtyard North Side	ND		

None Detected, CH = Chrysotile, RACM = Regulated asbestos containing material (friable), Cat. I = Non-friable (note ACM must be reclassified as a RACM if rendered friable during removal), Cat. II = Category II Non-friable (note ACM must be reclassified as a RACM if rendered friable during removal), sf = square feet, *Estimate quantity should be field verified prior to abatement or abatement design

APPENDIX B

ASBESTOS ANALYTICAL LABORATORY DATA

Report for:

Denise Wallen
Terracon Consultants, Inc. - Tustin, CA
23041 Avenida De La Carlota
Suite 350
Laguna Hills, CA 92653

Regarding: Eurofins EPK Built Environment Testing, LLC
Project: NA227079; LUSD Lakewood Elem School Pre-reno HazMat Survey
EML ID: 3052699

Approved by:



Approved Signatory
Danny Li

Dates of Analysis:
Asbestos PLM: 10-15-2022

Service SOPs: Asbestos PLM (EPA 40CFR App E to Sub E of Part 763 & EPA METHOD 600/R-93-116, SOP EM-AS-S-1267)
NVLAP Lab Code 200757-0

All samples were received in acceptable condition unless noted in the Report Comments portion in the body of the report. The results relate only to the samples as received and tested. The results include an inherent uncertainty of measurement associated with estimating percentages by polarized light microscopy. Measurement uncertainty data for sample results with >1% asbestos concentration can be provided when requested.

Eurofins EPK Built Environment Testing, LLC ("the Company"), a member of the Eurofins Built Environment Testing group of companies, shall have no liability to the client or the client's customer with respect to decisions or recommendations made, actions taken or courses of conduct implemented by either the client or the client's customer as a result of or based upon the Test Results. In no event shall the Company be liable to the client with respect to the Test Results except for the Company's own willful misconduct or gross negligence nor shall the Company be liable for incidental or consequential damages or lost profits or revenues to the fullest extent such liability may be disclaimed by law, even if the Company has been advised of the possibility of such damages, lost profits or lost revenues. In no event shall the Company's liability with respect to the Test Results exceed the amount paid to the Company by the client therefor.

Eurofins EPK Built Environment Testing, LLC

2841 Dow Avenue, Suite 300, Tustin, CA 92780

(866) 888-6653 www.eurofinsus.com/Built

Client: Terracon Consultants, Inc. - Tustin, CA

C/O: Denise Wallen

Re: NA227079; LUSD Lakewood Elem School Pre-
reno HazMat Survey

Date of Sampling: 10-05-2022

Date of Receipt: 10-10-2022

Date of Report: 10-17-2022

ASBESTOS PLM REPORT**Total Samples Submitted:** 57**Total Samples Analyzed:** 57**Total Samples with Layer Asbestos Content > 1%:** 20**Location: A-1A, 9in Off-White VFT with Black Mastic, Classroom A102 SW Corner**

Lab ID-Version‡: 14727609-1

Sample Layers	Asbestos Content
Off-White Floor Tile	5% Chrysotile
Black Mastic	5% Chrysotile
Sample Composite Homogeneity:	Good

Location: A-1B, 9in Off-White VFT with Black Mastic, Classroom A104 NE Corner

Lab ID-Version‡: 14727610-1

Sample Layers	Asbestos Content
Off-White Floor Tile	5% Chrysotile
Black Mastic	5% Chrysotile
Sample Composite Homogeneity:	Good

**Location: A-1C, 9in Off-White VFT with Black Mastic, Teachers Work Room A106
North Side**

Lab ID-Version‡: 14727611-1

Sample Layers	Asbestos Content
Off-White Floor Tile	5% Chrysotile
Black Mastic	5% Chrysotile
Sample Composite Homogeneity:	Good

Location: A-2A, 4in Blue Cove with Brown and White Glue, Classroom A102 SW Corner

Lab ID-Version‡: 14727612-1

Sample Layers	Asbestos Content
Blue Baseboard	ND
White Glue	ND
Brown Glue	ND
Sample Composite Homogeneity:	Good

The test report shall not be reproduced except in full, without written approval of the laboratory. The report must not be used by the client to claim product certification, approval, or endorsement by any agency of the federal government. The Company reserves the right to dispose of all samples after a period of thirty (30) days, according to all state and federal guidelines, unless otherwise specified.

Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.

‡ A "Version" indicated by "-x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

Eurofins EPK Built Environment Testing, LLC

2841 Dow Avenue, Suite 300, Tustin, CA 92780

(866) 888-6653 www.eurofinsus.com/Built

Client: Terracon Consultants, Inc. - Tustin, CA

C/O: Denise Wallen

Re: NA227079; LUSD Lakewood Elem School Pre-
reno HazMat Survey

Date of Sampling: 10-05-2022

Date of Receipt: 10-10-2022

Date of Report: 10-17-2022

ASBESTOS PLM REPORT**Location: A-2B, 4in Blue Cove with Brown and White Glue, Classroom A104 NE Corner**

Lab ID-Version‡: 14727613-1

Sample Layers	Asbestos Content
Blue Baseboard	ND
Brown Glue	ND
Sample Composite Homogeneity: Good	

Comments: White Glue not detected.

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Client: Terracon Consultants, Inc. - Tustin, CA
C/O: Denise Wallen
Re: NA227079; LUSD Lakewood Elem School Pre-
reno HazMat Survey

Date of Sampling: 10-05-2022
Date of Receipt: 10-10-2022
Date of Report: 10-17-2022

ASBESTOS PLM REPORT

Location: A-2C, 4in Blue Cove with Brown and White Glue, Teacher Work Room A106 North Side

Lab ID-Version‡: 14727614-1

Sample Layers	Asbestos Content
Blue Baseboard	ND
White Glue	ND
Brown Glue	ND
Sample Composite Homogeneity: Good	

Location: A-3A, Perimeter Drywall w/ Joint Compound, Classroom A102 SW Corner

Lab ID-Version‡: 14727615-1

Sample Layers	Asbestos Content
Off-White Joint Compound with Paint	2% Chrysotile
Cream Tape	ND
Off-White Joint Compound	2% Chrysotile
White Drywall	ND
Composite Asbestos Fibrous Content:	< 1% Asbestos
Composite Non-Asbestos Content:	15% Cellulose
Sample Composite Homogeneity: Good	

Comments: Composite asbestos content provided is only for Drywall/Joint compound. Composite content provided for this analysis has been performed by following the NESHAP guidelines.

Location: A-3B, Perimeter Drywall w/ Joint Compound, Classroom A104 SE Door

Lab ID-Version‡: 14727616-1

Sample Layers	Asbestos Content
Off-White Joint Compound	2% Chrysotile
White Drywall	ND
Composite Asbestos Fibrous Content:	< 1% Asbestos
Composite Non-Asbestos Content:	5% Cellulose
Sample Composite Homogeneity: Good	

Comments: Composite asbestos content provided is only for Drywall/Joint compound. Composite content provided for this analysis has been performed by following the NESHAP guidelines.

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Client: Terracon Consultants, Inc. - Tustin, CA

C/O: Denise Wallen

Re: NA227079; LUSD Lakewood Elem School Pre-
reno HazMat Survey

Date of Sampling: 10-05-2022

Date of Receipt: 10-10-2022

Date of Report: 10-17-2022

ASBESTOS PLM REPORT**Location: A-3C, Perimeter Drywall w/ Joint Compound, Mechanical A111 NE Corner**

Lab ID-Version‡: 14727617-1

Sample Layers	Asbestos Content
Off-White Joint Compound with Paint	2% Chrysotile
Cream Tape	ND
Off-White Joint Compound	2% Chrysotile
White Drywall	ND
Composite Asbestos Fibrous Content:	< 1% Asbestos
Composite Non-Asbestos Content:	15% Cellulose
Sample Composite Homogeneity:	Good

Comments: Composite asbestos content provided is only for Drywall/Joint compound. Composite content provided for this analysis has been performed by following the NESHAP guidelines.

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reno HazMat Survey

Date of Sampling: 10-05-2022

Date of Receipt: 10-10-2022

Date of Report: 10-17-2022

ASBESTOS PLM REPORT**Location: A-4A, 1x2 ACT (Nailed In), Teachers Work Room A106 SE Corner**

Lab ID-Version‡: 14727618-1

Sample Layers	Asbestos Content
White Ceiling Tile	ND
Composite Non-Asbestos Content:	90% Cellulose
Sample Composite Homogeneity:	Good

Location: A-4B, 1x2 ACT (Nailed In), Classroom A102 South Ceiling

Lab ID-Version‡: 14727619-1

Sample Layers	Asbestos Content
White Ceiling Tile	ND
Composite Non-Asbestos Content:	90% Cellulose
Sample Composite Homogeneity:	Good

Location: A-4C, 1x2 ACT (Nailed In), Classroom A101 North Ceiling

Lab ID-Version‡: 14727620-1

Sample Layers	Asbestos Content
White Ceiling Tile	ND
Composite Non-Asbestos Content:	90% Cellulose
Sample Composite Homogeneity:	Good

Location: A-5A, Black Sink Undercoat, Teachers Workroom A106 Sink

Lab ID-Version‡: 14727621-1

Sample Layers	Asbestos Content
Black Sink Undercoating	2% Chrysotile
Sample Composite Homogeneity:	Good

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 C/O: Denise Wallen
 Re: NA227079; LUSD Lakewood Elem School Pre-
 reno HazMat Survey

Date of Sampling: 10-05-2022
 Date of Receipt: 10-10-2022
 Date of Report: 10-17-2022

ASBESTOS PLM REPORT

Location: A-5B, Black Sink Undercoat, Teachers Workroom A106 Sink

Lab ID-Version‡: 14727622-1

Sample Layers	Asbestos Content
Black Sink Undercoating	2% Chrysotile
Sample Composite Homogeneity:	Good

Location: A-6A, Core Drywall w/ Joint Compound, Mechanical A111 Center Ceiling

Lab ID-Version‡: 14727623-1

Sample Layers	Asbestos Content
Off-White Joint Compound	2% Chrysotile
White Drywall	ND
Composite Asbestos Fibrous Content:	< 1% Asbestos
Composite Non-Asbestos Content:	5% Cellulose
Sample Composite Homogeneity:	Good

Comments: Composite asbestos content provided is only for Drywall/Joint compound. Composite content provided for this analysis has been performed by following the NESHAP guidelines.

Location: A-6B, Core Drywall w/ Joint Compound, Janitor A108 NE Corner

Lab ID-Version‡: 14727624-1

Sample Layers	Asbestos Content
Off-White Joint Compound	2% Chrysotile
White Drywall	ND
Composite Asbestos Fibrous Content:	< 1% Asbestos
Composite Non-Asbestos Content:	5% Cellulose
Sample Composite Homogeneity:	Good

Comments: Composite asbestos content provided is only for Drywall/Joint compound. Composite content provided for this analysis has been performed by following the NESHAP guidelines.

Location: A-6C, Core Drywall w/ Joint Compound, Girls Restroom A109 Ceiling at Entry

Lab ID-Version‡: 14727625-1

Sample Layers	Asbestos Content
Off-White Joint Compound with Paint	2% Chrysotile
Cream Tape	ND
Off-White Joint Compound	2% Chrysotile
White Drywall	ND
Composite Asbestos Fibrous Content:	< 1% Asbestos
Composite Non-Asbestos Content:	15% Cellulose
Sample Composite Homogeneity:	Good

Comments: Composite asbestos content provided is only for Drywall/Joint compound. Composite content provided for this analysis has been performed by following the NESHAP guidelines.

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reno HazMat Survey

Date of Sampling: 10-05-2022

Date of Receipt: 10-10-2022

Date of Report: 10-17-2022

ASBESTOS PLM REPORT**Location: A-7A, White Sink Undercoat, Classroom A103 Sink**

Lab ID-Version‡: 14727626-1

Sample Layers	Asbestos Content
White Sink Undercoating	2% Chrysotile
Sample Composite Homogeneity: Good	

Location: A-7B, White Sink Undercoat, Classroom A102 Sink

Lab ID-Version‡: 14727627-1

Sample Layers	Asbestos Content
White Sink Undercoating	2% Chrysotile
Sample Composite Homogeneity: Good	

Location: A-7C, White Sink Undercoat, Classroom A104 Sink

Lab ID-Version‡: 14727628-1

Sample Layers	Asbestos Content
White Sink Undercoating	2% Chrysotile
Sample Composite Homogeneity: Good	

Location: A-8A, Gray Duct Putty, Mechanical A111 Center 24 in Square Duct

Lab ID-Version‡: 14727629-1

Sample Layers	Asbestos Content
Gray Non-Fibrous Material (Duct Putty)	ND
Sample Composite Homogeneity: Good	

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Date of Sampling: 10-05-2022

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ASBESTOS PLM REPORT**Location: A-8B, Gray Duct Putty, Mechanical A111 Center 24 in Square Duct**

Lab ID-Version‡: 14727630-1

Sample Layers	Asbestos Content
Gray Non-Fibrous Material (Duct Putty)	ND
Sample Composite Homogeneity: Good	

Location: A-8C, Gray Duct Putty, Classroom A102 Overhead Duct

Lab ID-Version‡: 14727631-1

Sample Layers	Asbestos Content
Gray Non-Fibrous Material (Duct Putty)	ND
Sample Composite Homogeneity: Good	

Location: A-9A, White Duct Mastic, Mechanical A111 Central 4in Round Duct

Lab ID-Version‡: 14727632-1

Sample Layers	Asbestos Content
White Mastic	ND
Sample Composite Homogeneity: Good	

Location: A-9B, White Duct Mastic, Mechanical A111 Central 4in Round Duct

Lab ID-Version‡: 14727633-1

Sample Layers	Asbestos Content
White Mastic	ND
Sample Composite Homogeneity: Good	

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reno HazMat Survey

Date of Sampling: 10-05-2022

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ASBESTOS PLM REPORT**Location: A-10A, Yellow Carpet Adhesive, Classroom A101 NE Corner**

Lab ID-Version‡: 14727634-1

Sample Layers	Asbestos Content
Yellow Carpet Adhesive	ND
Sample Composite Homogeneity:	Good

Location: A-10B, Yellow Carpet Adhesive, Classroom A101 NW Center Floor

Lab ID-Version‡: 14727635-1

Sample Layers	Asbestos Content
Yellow Carpet Adhesive	ND
Sample Composite Homogeneity:	Good

Location: A-10C, Yellow Carpet Adhesive, Hall A110 SE Corner

Lab ID-Version‡: 14727636-1

Sample Layers	Asbestos Content
Yellow Carpet Adhesive	ND
Sample Composite Homogeneity:	Good

**Location: A-11A, Mortar and Grout Associated w/ 4in Light Blue Ceramic Wall Tile,
Girls Restroom A107 Behind Door**

Lab ID-Version‡: 14727637-1

Sample Layers	Asbestos Content
Blue Ceramic Tile	ND
Gray Grout	ND
Gray Mortar	ND
Sample Composite Homogeneity:	Moderate

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Re: NA227079; LUSD Lakewood Elem School Pre-
reno HazMat Survey

Date of Sampling: 10-05-2022

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Date of Report: 10-17-2022

ASBESTOS PLM REPORT**Location: A-11B, Mortar and Grout Associated w/ 4in Light Blue Ceramic Wall Tile,
Girls Restroom A107 Behind Door**

Lab ID-Version‡: 14727638-1

Sample Layers	Asbestos Content
Blue Ceramic Tile	ND
Gray Grout	ND
Gray Mortar	ND
Sample Composite Homogeneity:	Moderate

**Location: A-12A, Mortar and Grout Associated w/ 1in Light Blue Floor Tile, Girls
Restroom A107 at Drain**

Lab ID-Version‡: 14727639-1

Sample Layers	Asbestos Content
Blue Flooring Tile	ND
Gray Grout	ND
Gray Mortar	ND
Sample Composite Homogeneity:	Moderate

**Location: A-12B, Mortar and Grout Associated w/ 1in Light Blue Floor Tile, Girls
Restroom A107 at Drain**

Lab ID-Version‡: 14727640-1

Sample Layers	Asbestos Content
Blue Flooring Tile	ND
Gray Grout	ND
Gray Mortar	ND
Sample Composite Homogeneity:	Moderate

**Location: A-13A, Mortar and Grout Associated w/ 1in Green Floor Tile, Boys Restroom
A109 Central Floor**

Lab ID-Version‡: 14727641-1

Sample Layers	Asbestos Content
Green Flooring Tile	ND
Gray Grout	ND
Gray Mortar	ND
Sample Composite Homogeneity:	Good

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Re: NA227079; LUSD Lakewood Elem School Pre-
reno HazMat Survey

Date of Sampling: 10-05-2022

Date of Receipt: 10-10-2022

Date of Report: 10-17-2022

ASBESTOS PLM REPORT**Location: A-13B, Mortar and Grout Associated w/ 1in Green Floor Tile, Boys Restroom
A109 Central Floor**

Lab ID-Version‡: 14727642-1

Sample Layers	Asbestos Content
Green Flooring Tile	ND
Gray Grout	ND
Gray Mortar	ND
Sample Composite Homogeneity: Good	

**Location: A-14A, Mortar and Grout Associated w/ 4in Light Green Wall Tile, Boys
Restroom A109 Behind Door**

Lab ID-Version‡: 14727643-1

Sample Layers	Asbestos Content
Green Tile	ND
White Grout	ND
Gray Mortar	ND
Sample Composite Homogeneity: Good	

**Location: A-14B, Mortar and Grout Associated w/ 4in Light Green Wall Tile, Boys
Restroom A109 Behind Door**

Lab ID-Version‡: 14727644-1

Sample Layers	Asbestos Content
Green Tile	ND
White Grout	ND
Gray Mortar	ND
Sample Composite Homogeneity: Good	

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Date of Sampling: 10-05-2022

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ASBESTOS PLM REPORT**Location: A-15A, Partition Drywall w/ Joint Compound, Classroom A103 SE at Door**

Lab ID-Version‡: 14727645-1

Sample Layers	Asbestos Content
Off-White Joint Compound with Paint	2% Chrysotile
Cream Tape	ND
Off-White Joint Compound	2% Chrysotile
White Drywall	ND
Composite Asbestos Fibrous Content:	< 1% Asbestos
Composite Non-Asbestos Content:	15% Cellulose
Sample Composite Homogeneity:	Good

Comments: Composite asbestos content provided is only for Drywall/Joint compound. Composite content provided for this analysis has been performed by following the NESHAP guidelines.

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C/O: Denise Wallen
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Date of Sampling: 10-05-2022
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Date of Report: 10-17-2022

ASBESTOS PLM REPORT

Location: A-15B, Partition Drywall w/ Joint Compound, Classroom A103 SE Behind Door

Lab ID-Version‡: 14727646-1

Sample Layers	Asbestos Content
Off-White Joint Compound with Paint	2% Chrysotile
Cream Tape	ND
Off-White Joint Compound	2% Chrysotile
White Drywall	ND
Composite Asbestos Fibrous Content:	< 1% Asbestos
Composite Non-Asbestos Content:	15% Cellulose
Sample Composite Homogeneity:	Good

Comments: Composite asbestos content provided is only for Drywall/Joint compound. Composite content provided for this analysis has been performed by following the NESHAP guidelines.

Location: A-15C, Partition Drywall w/ Joint Compound, Classroom A103 SW at Door

Lab ID-Version‡: 14727647-1

Sample Layers	Asbestos Content
Off-White Joint Compound with Paint	2% Chrysotile
Cream Tape	ND
Off-White Joint Compound	2% Chrysotile
White Drywall	ND
Composite Asbestos Fibrous Content:	< 1% Asbestos
Composite Non-Asbestos Content:	15% Cellulose
Sample Composite Homogeneity:	Good

Comments: Composite asbestos content provided is only for Drywall/Joint compound. Composite content provided for this analysis has been performed by following the NESHAP guidelines.

Location: A-16A, Black Sealant, South Exterior

Lab ID-Version‡: 14727648-1

Sample Layers	Asbestos Content
Black Sealant	5% Chrysotile
Sample Composite Homogeneity:	Good

Location: A-16B, Black Sealant, South West Exterior Corner

Lab ID-Version‡: 14727649-1

Sample Layers	Asbestos Content
Black Sealant	5% Chrysotile
Sample Composite Homogeneity:	Good

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Date of Sampling: 10-05-2022

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Date of Report: 10-17-2022

ASBESTOS PLM REPORT**Location: A-16C, Black Sealant, North East Exterior Corner**

Lab ID-Version‡: 14727650-1

Sample Layers	Asbestos Content
Black Sealant	5% Chrysotile
Sample Composite Homogeneity: Good	

Location: A-17A, Black Window Gasket, South Side Exterior West

Lab ID-Version‡: 14727652-1

Sample Layers	Asbestos Content
Black Gasket	ND
Sample Composite Homogeneity: Good	

Location: A-17B, Black Window Gasket, NE Exterior

Lab ID-Version‡: 14727653-1

Sample Layers	Asbestos Content
Black Gasket	ND
Sample Composite Homogeneity: Good	

Location: A-17C, Black Window Gasket, South Side Exterior East

Lab ID-Version‡: 14727654-1

Sample Layers	Asbestos Content
Black Gasket	ND
Sample Composite Homogeneity: Good	

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Date of Sampling: 10-05-2022
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ASBESTOS PLM REPORT

Location: A-18A, Main Rolled Roofing Field w/ Insulation, Raised Roof NE Sided

Lab ID-Version‡: 14727655-1

Sample Layers	Asbestos Content
Black Roofing Shingle with Pebbles	ND
Black Roofing Felt	ND
Yellow Foam	ND
Composite Non-Asbestos Content:	30% Glass Fibers
Sample Composite Homogeneity:	Moderate

Location: A-18B, Main Rolled Roofing Field w/ Insulation, SE Awning

Lab ID-Version‡: 14727656-1

Sample Layers	Asbestos Content
Black Roofing Shingle with Pebbles	ND
Black Roofing Felt	ND
Yellow Foam	ND
Composite Non-Asbestos Content:	30% Glass Fibers
Sample Composite Homogeneity:	Moderate

Location: A-18C, Main Rolled Roofing Field w/ Insulation, Lower Roof West Side

Lab ID-Version‡: 14727657-1

Sample Layers	Asbestos Content
Black Roofing Shingle with Pebbles	ND
Black Roofing Felt	ND
Yellow Foam	ND
Composite Non-Asbestos Content:	30% Glass Fibers
Sample Composite Homogeneity:	Moderate

Location: A-19A, Rolled Roof WB, Upper Roof Vent North of Center

Lab ID-Version‡: 14727658-1

Sample Layers	Asbestos Content
Black Roofing Shingle with Pebbles	ND
Composite Non-Asbestos Content:	20% Synthetic Fibers
Sample Composite Homogeneity:	Good

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Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.

‡ A "Version" indicated by "-x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

Client: Terracon Consultants, Inc. - Tustin, CA
C/O: Denise Wallen
Re: NA227079; LUSD Lakewood Elem School Pre-
reno HazMat Survey

Date of Sampling: 10-05-2022
Date of Receipt: 10-10-2022
Date of Report: 10-17-2022

ASBESTOS PLM REPORT

Location: A-19B, Rolled Roof WB, SE HVAC Unit Ac-Al Lower Roof

Lab ID-Version‡: 14727659-1

Sample Layers	Asbestos Content
Black Roofing Shingle with Pebbles	ND
Composite Non-Asbestos Content:	20% Synthetic Fibers
Sample Composite Homogeneity:	Good

Location: A-19C, Rolled Roof WB, West Lower Roof Vent

Lab ID-Version‡: 14727660-1

Sample Layers	Asbestos Content
Black Roofing Shingle with Pebbles	ND
Composite Non-Asbestos Content:	20% Synthetic Fibers
Sample Composite Homogeneity:	Good

Location: A-20A, Black Penetration Mastic, NE Upper Pipe Penetration

Lab ID-Version‡: 14727661-1

Sample Layers	Asbestos Content
Black Roofing Mastic	ND
Sample Composite Homogeneity:	Good

Location: A-20B, Black Penetration Mastic, Lower Roof SE Pipe Penetration

Lab ID-Version‡: 14727662-1

Sample Layers	Asbestos Content
Black Roofing Mastic	ND
Sample Composite Homogeneity:	Good

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Eurofins EPK Built Environment Testing, LLC

2841 Dow Avenue, Suite 300, Tustin, CA 92780

(866) 888-6653 www.eurofinsus.com/Built

Client: Terracon Consultants, Inc. - Tustin, CA

C/O: Denise Wallen

Re: NA227079; LUSD Lakewood Elem School Pre-
reno HazMat Survey

Date of Sampling: 10-05-2022

Date of Receipt: 10-10-2022

Date of Report: 10-17-2022

ASBESTOS PLM REPORT**Location: A-20C, Black Penetration Mastic, NE Lower Roof Vent Penetration**

Lab ID-Version‡: 14727663-1

Sample Layers	Asbestos Content
Black Roofing Mastic	ND
Sample Composite Homogeneity:	Good

Location: S-21A, White Window Caulk, A104 East Exterior Window

Lab ID-Version‡: 14727664-1

Sample Layers	Asbestos Content
White Caulk	ND
Sample Composite Homogeneity:	Good

Location: S-21A, White Window Caulk, A104 East Exterior Window

Lab ID-Version‡: 14727665-1

Sample Layers	Asbestos Content
White Caulk	ND
Sample Composite Homogeneity:	Good

Location: S-21A, White Window Caulk, A102 West Exterior Window

Lab ID-Version‡: 14727666-1

Sample Layers	Asbestos Content
White Caulk	ND
Sample Composite Homogeneity:	Good

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Report for:

Denise Wallen
Terracon Consultants, Inc. - Tustin, CA
23041 Avenida De La Carlota
Suite 350
Laguna Hills, CA 92653

Regarding: Eurofins EPK Built Environment Testing, LLC
Project: NA227079; LUSD Lakewood Elem School Pre-Reno HazMat Survey
EML ID: 3052672

Approved by:



Approved Signatory
Danny Li

Dates of Analysis:
Asbestos PLM: 10-14-2022

Service SOPs: Asbestos PLM (EPA 40CFR App E to Sub E of Part 763 & EPA METHOD 600/R-93-116, SOP EM-AS-S-1267)
NVLAP Lab Code 200757-0

All samples were received in acceptable condition unless noted in the Report Comments portion in the body of the report. The results relate only to the samples as received and tested. The results include an inherent uncertainty of measurement associated with estimating percentages by polarized light microscopy. Measurement uncertainty data for sample results with >1% asbestos concentration can be provided when requested.

Eurofins EPK Built Environment Testing, LLC ("the Company"), a member of the Eurofins Built Environment Testing group of companies, shall have no liability to the client or the client's customer with respect to decisions or recommendations made, actions taken or courses of conduct implemented by either the client or the client's customer as a result of or based upon the Test Results. In no event shall the Company be liable to the client with respect to the Test Results except for the Company's own willful misconduct or gross negligence nor shall the Company be liable for incidental or consequential damages or lost profits or revenues to the fullest extent such liability may be disclaimed by law, even if the Company has been advised of the possibility of such damages, lost profits or lost revenues. In no event shall the Company's liability with respect to the Test Results exceed the amount paid to the Company by the client therefor.

Eurofins EPK Built Environment Testing, LLC

2841 Dow Avenue, Suite 300, Tustin, CA 92780

(866) 888-6653 www.eurofinsus.com/Built

Client: Terracon Consultants, Inc. - Tustin, CA

C/O: Denise Wallen

Re: NA227079; LUSD Lakewood Elem School Pre- Date of Receipt: 10-10-2022

Reno HazMat Survey Date of Report: 10-14-2022

ASBESTOS PLM REPORT**Total Samples Submitted:** 2**Total Samples Analyzed:** 2**Total Samples with Layer Asbestos Content > 1%:** 0**Location: Pb-A-06, White, Classroom A101 SE Behind Door**

Lab ID-Version‡: 14730337-1

Sample Layers	Asbestos Content
White Paint	ND
Sample Composite Homogeneity:	Good

Location: Pb-A-07, Beige, Upper Lower Transition Wall East

Lab ID-Version‡: 14730338-1

Sample Layers	Asbestos Content
Beige Paint	ND
Sample Composite Homogeneity:	Good

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Report for:

Denise Wallen
Terracon Consultants, Inc. - Tustin, CA
23041 Avenida De La Carlota
Suite 350
Laguna Hills, CA 92653

Regarding: Eurofins EPK Built Environment Testing, LLC
Project: NA227079; LUSD Lakewood Elem School Pre-reno HazMat Survey
EML ID: 3052699

Approved by:



Approved Signatory
Danny Li

Dates of Analysis:

Asbestos-EPA 400 point count: 11-16-2022

Service SOPs: Asbestos-EPA 400 point count (EPA 40CFR App E to Sub E of Part 763 & EPA METHOD 600/R-93-116, SOP EM-AS-S-1262)
NVLAP Lab Code 200757-0

All samples were received in acceptable condition unless noted in the Report Comments portion in the body of the report. Due to the nature of the analyses performed, field blank correction of results is not applied. The results relate only to the samples as received and tested.

Eurofins EPK Built Environment Testing, LLC ("the Company"), a member of the Eurofins Built Environment Testing group of companies, shall have no liability to the client or the client's customer with respect to decisions or recommendations made, actions taken or courses of conduct implemented by either the client or the client's customer as a result of or based upon the Test Results. In no event shall the Company be liable to the client with respect to the Test Results except for the Company's own willful misconduct or gross negligence nor shall the Company be liable for incidental or consequential damages or lost profits or revenues to the fullest extent such liability may be disclaimed by law, even if the Company has been advised of the possibility of such damages, lost profits or lost revenues. In no event shall the Company's liability with respect to the Test Results exceed the amount paid to the Company by the client therefor.

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(866) 888-6653 www.eurofinsus.com/Built

Client: Terracon Consultants, Inc. - Tustin, CA

C/O: Denise Wallen

Re: NA227079; LUSD Lakewood Elem School Pre-
reno HazMat Survey

Date of Sampling: 10-05-2022

Date of Receipt: 10-10-2022

Date of Report: 11-16-2022

ASBESTOS POINT COUNT REPORT

Location:	A-3A Perimeter Drywall w/ Joint Compound, Classroom A102 SW Corner		
Total Points Counted:	400		
Lab ID-Version‡:	14864338-1		
Sample Layers	Asbestos Type	Asbestos Points Counted	Asbestos Concentration (%)
White Joint Compound with Drywall (Composite)	Chrysotile	0	< 0.25
Layer Totals:		0	NA

Comments: Asbestos was detected, but no points counted.

Location:	A-3B Perimeter Drywall w/ Joint Compound, Classroom A104 SE Door		
Total Points Counted:	400		
Lab ID-Version‡:	14864339-1		
Sample Layers	Asbestos Type	Asbestos Points Counted	Asbestos Concentration (%)
White Joint Compound with Drywall (Composite)	Chrysotile	0	< 0.25
Layer Totals:		0	NA

Comments: Asbestos was detected, but no points counted.

Location:	A-3C Perimeter Drywall w/ Joint Compound, Mechanical A111 NE Corner		
Total Points Counted:	400		
Lab ID-Version‡:	14864340-1		
Sample Layers	Asbestos Type	Asbestos Points Counted	Asbestos Concentration (%)
White Joint Compound with Drywall (Composite)	Chrysotile	0	< 0.25
Layer Totals:		0	NA

Comments: Asbestos was detected, but no points counted.

The analytical sensitivity is 1 asbestos point. The limit of detection is 1 asbestos point divided by the total number of points counted and multiplied by 100.

The results relate only to the items tested. Interpretation is left to the company and/or persons who conducted the field work. The test report shall not be reproduced except in full, without written approval of the laboratory. The report must not be used by the client to claim product certification, approval, or endorsement by any agency of the federal government.

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Client: Terracon Consultants, Inc. - Tustin, CA

C/O: Denise Wallen

Re: NA227079; LUSD Lakewood Elem School Pre-
reno HazMat Survey

Date of Sampling: 10-05-2022

Date of Receipt: 10-10-2022

Date of Report: 11-16-2022

ASBESTOS POINT COUNT REPORT

Location:	A-6A Core Drywall w/ Joint Compound, Mechanical A111 Center Ceiling		
Total Points Counted:	400		
Lab ID-Version‡:	14864341-1		
Sample Layers	Asbestos Type	Asbestos Points Counted	Asbestos Concentration (%)
White Joint Compound with Drywall (Composite)	Chrysotile	0	< 0.25
Layer Totals:		0	NA

Comments: Asbestos was detected, but no points counted.

Location:	A-6B Core Drywall w/ Joint Compound, Janitor A108 NE Corner		
Total Points Counted:	400		
Lab ID-Version‡:	14864342-1		
Sample Layers	Asbestos Type	Asbestos Points Counted	Asbestos Concentration (%)
White Joint Compound with Drywall (Composite)	Chrysotile	0	< 0.25
Layer Totals:		0	NA

Comments: Asbestos was detected, but no points counted.

Location:	A-6C Core Drywall w/ Joint Compound, Girls Restroom A109 Ceiling at Entry		
Total Points Counted:	400		
Lab ID-Version‡:	14864343-1		
Sample Layers	Asbestos Type	Asbestos Points Counted	Asbestos Concentration (%)
White Joint Compound with Drywall (Composite)	Chrysotile	0	< 0.25
Layer Totals:		0	NA

Comments: Asbestos was detected, but no points counted.

The analytical sensitivity is 1 asbestos point. The limit of detection is 1 asbestos point divided by the total number of points counted and multiplied by 100.

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Client: Terracon Consultants, Inc. - Tustin, CA

C/O: Denise Wallen

Re: NA227079; LUSD Lakewood Elem School Pre-
reno HazMat Survey

Date of Sampling: 10-05-2022

Date of Receipt: 10-10-2022

Date of Report: 11-16-2022

ASBESTOS POINT COUNT REPORT

Location:	A-15A Partition Drywall w/ Joint Compound, Classroom A103 SE at Door		
Total Points Counted:	400		
Lab ID-Version‡:	14864344-1		
Sample Layers	Asbestos Type	Asbestos Points Counted	Asbestos Concentration (%)
White Joint Compound with Drywall (Composite)	Chrysotile	0	< 0.25
Layer Totals:		0	NA

Comments: Asbestos was detected, but no points counted.

Location:	A-15B Partition Drywall w/ Joint Compound, Classroom A103 SE Behind Door		
Total Points Counted:	400		
Lab ID-Version‡:	14864345-1		
Sample Layers	Asbestos Type	Asbestos Points Counted	Asbestos Concentration (%)
White Joint Compound with Drywall (Composite)	Chrysotile	0	< 0.25
Layer Totals:		0	NA

Comments: Asbestos was detected, but no points counted.

Location:	A-15C Partition Drywall w/ Joint Compound, Classroom A103 SW at Door		
Total Points Counted:	400		
Lab ID-Version‡:	14864346-1		
Sample Layers	Asbestos Type	Asbestos Points Counted	Asbestos Concentration (%)
White Joint Compound with Drywall (Composite)	Chrysotile	0	< 0.25
Layer Totals:		0	NA

Comments: Asbestos was detected, but no points counted.

The analytical sensitivity is 1 asbestos point. The limit of detection is 1 asbestos point divided by the total number of points counted and multiplied by 100.

The results relate only to the items tested. Interpretation is left to the company and/or persons who conducted the field work. The test report shall not be reproduced except in full, without written approval of the laboratory. The report must not be used by the client to claim product certification, approval, or endorsement by any agency of the federal government.

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003052699

1220 Concord Avenue, Suite 450

Concord, CA 94520

P (925) 609-7224

Terracon.com

E-MAIL REPORT TO:		<input checked="" type="checkbox"/> tony.mikacich@terracon.com Project Manager		Asbestos Bulk Samples PLM Analysis - Analyze all samples EMLabPK TAT: 3-5 days	
		<input checked="" type="checkbox"/> denise.wallin@terracon.com Project Assistant			
Project #:	NA227079	Project Address:	1100 N Ham Lane, Lodi	Sampling Date:	10/05/2022 - 10/07/2022
Project Name:	LUSD Lakewood Elem School Pre-reno HazMat Survey			Sampled By:	J. Alexander & W. Renner
Building Name / Area:		Building A		Page 2 of 3	

HM# A-01	Material Description	9 in off-white VET with black mastic	Quantity
Sample ID	Sample Location & Material Location		
A-1 A	Classroom A102	SW corner	4,200 sq. ft
A-1 B	Classroom A104	NE corner	
A-1 C	Teachers Work Room A106	North side	
HM# A-02	Material Description:	4 in blue core with brown and white glue	Quantity
Sample ID	Sample Location & Material Location		
A-2 A	Classroom A102	SW corner	310 sq. ft
A-2 B	Classroom A104	NE corner	
A-2 C	Teachers Work room A106	North side	
HM# A-03	Material Description:	Perimeter drywall w/ joint compound	Quantity
Sample ID	Sample Location & Material Location		
A-3 A	Classroom A102	SW corner	2,880 sq. ft
A-3 B	Classroom A104	SE Door	
A-3 C	Mechanical A111	NE corner	
HM# A-04	Material Description:	1x2 ACT (nailed in)	Quantity
Sample ID	Sample Location & Material Location		
A-4 A	Teachers work room A106	SE corner	2,500 sq. ft
A-4 B	Classroom A102	South ceiling	
A-4 C	Classroom A101	North ceiling	
HM# A-05	Material Description:	black sink undercoat	Quantity
Sample ID	Sample Location & Material Location		
A-5 A	Teachers workroom A106	sink	4 sq. ft
A-5 B	Teachers workroom A106	sink	
A-5 C			

Relinquished By:

J. Alexander

Signature:

Date/Time:

10/7/22

Received By:

ANDREW ARESTIO

Signature:

Date/Time:

10/10/22 9:30 A

Relinquished By:

Signature:

Date/Time:

Received By:

Signature:

Date/Time:



003052699

1220 Concord Avenue, Suite 450

Concord, CA 94520

P (925) 609-7224

Terracon.com

E-MAIL REPORT TO:		<input checked="" type="checkbox"/> tony.mikacich@terracon.com Project Manager		Asbestos Bulk Samples	
		<input checked="" type="checkbox"/> denise.wallen@terracon.com Project Assistant		PLM Analysis - Analyze all samples	
				EMLabPK TAT: 3-5 days	
Project #:	NA227079	Project Address:	1100 N Ham Lane, Lodi	Sampling Date:	10/05/2022 – 10/07/2022
Project Name:	LUSD Lakewood Elem School Pre-reno HazMat Survey			Sampled By:	J. Alexander & W. Renner
Building Name / Area:		Building A		Page 1 of 3	

HM#	A-06	Material Description	Core drywall w/ dark compound	Quantity
Sample ID		Sample Location & Material Location		
A-6A		Mechanical A111 Center ceiling		500 sq. ft
A-6B		Janitor A108 NE corner		
A-6C		Girls restroom A109 ceiling at entry		
HM#	A-07	Material Description:	White sink undercoat	Quantity
Sample ID		Sample Location & Material Location		
A-7A		Classroom A103 Sink		20 sq. ft
A-7B		Classroom A102 Sink		
A-7C		Classroom A104 Sink		
HM#	A-08	Material Description:	Gray duct putty	Quantity
Sample ID		Sample Location & Material Location		
A-8A		Mechanical A111 Center 24 in square duct		50 sq. ft
A-8B		Mechanical A111 Center 24 in square duct		
A-8C		Classroom A102 Overhead duct		
HM#	A-09	Material Description:	White duct mastic	Quantity
Sample ID		Sample Location & Material Location		
A-9A		Mechanical A111 Center 4 in round duct		10 sq. ft
A-9B		Mechanical A111 Center 4 in round duct		
C				
HM#	A-10	Material Description:	Yellow carpet adhesive	Quantity
Sample ID		Sample Location & Material Location		
A-10A		Classroom A101 NW corner		4,300 sq. ft
A-10B		Classroom A103 NW center floor		
A-10C		Hall A110 SE corner		

Relinquished By:

J. Alexander

Signature:

Date/Time:

10/7/22

Received By:

ANDREW ARETEOPOULOS

Signature:

Date/Time:

10/10/22 9:30A

Relinquished By:

Signature:

Date/Time:

Received By:

Signature:

Date/Time:



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1220 Concord Avenue, Suite 450

Concord, CA 94520

P (925) 609-7224

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E-MAIL REPORT TO:		<input checked="" type="checkbox"/> tony.mikacich@terracon.com Project Manager		Asbestos Bulk Samples	
		<input checked="" type="checkbox"/> denise.wallen@terracon.com Project Assistant		PLM Analysis - Analyze all samples	
				EMLabPK TAT: 3-5 days	
Project #:	NA227079	Project Address:	1100 N Ham Lane, Lodi	Sampling Date:	10/05/2022 – 10/07/2022
Project Name:	LUSD Lakewood Elem School Pre-reno HazMat Survey			Sampled By:	J. Alexander & W. Renner
Building Name / Area:		Building A		Page 3 of 3	

HM#	Material Description	Sample ID	Sample Location & Material Location	Quantity
A-11	Material Description: mortar and grout associated w/ 4 in light blue ceramic wall tile	A-11 A	Girls restroom A107 behind door	350 sq. ft
		A-11 B	Girls restroom A107 behind door	
		C		
A-12	Material Description: Mortar and Grout associated w/ 1 in light blue floor tile	A-12 A	Girls restroom A107 at door	200 sq. ft
		A-12 B	Girls restroom A107 at door	
		C		
A-13	Material Description: Mortar and Grout associated w/ 1 in Green floor tile	A-13 A	Boys restroom A109 Central floor	200 sq. ft
		A-13 B	Boys restroom A109 Central floor	
		C		
A-14	Material Description: Mortar and Grout associated w/ 4 in light green wall tile	A-14 A	Boys restroom A109 behind door	350 sq. ft
		A-14 B	Boys restroom A109 behind door	
		C		
A-15	Material Description: Partition drywall w/ Joint compound	A-15 A	Classroom A103 SE at door	2,400 sq. ft
		A-15 B	Classroom A101 SE behind door	
		A-15 C	Classroom A103 SW at door	

Relinquished By:

J. Alexander

Signature:

Date/Time:

10/7/22

Received By:

ANDREW ARESTEGUI

Signature:

Date/Time:

10/10/22 9:30 AM

Relinquished By:

Signature:

Date/Time:

Received By:

Signature:

Date/Time:



003052699

1220 Concord Avenue, Suite 450

Concord, CA 94520

P (925) 609-7224

Terracon.com

E-MAIL REPORT TO:		<input checked="" type="checkbox"/> tony.mikacich@terracon.com Project Manager		Asbestos Bulk Samples	
		<input checked="" type="checkbox"/> denise.wallen@terracon.com Project Assistant		PLM Analysis - Analyze all samples	
				EMLabPK TAT: 3-5 days	
Project #:	NA227079	Project Address:	1100 N Ham Lane, Lodi	Sampling Date:	10/05/2022 - 10/07/2022
Project Name:	LUSD Lakewood Elem School Pre-reno HazMat Survey			Sampled By:	J. Alexander & W. Renner
Building Name / Area:			Building A	Page 4 of 4	

HM#	Material Description	Sample ID	Sample Location & Material Location	Quantity
A-14	Black Siding	A-14A	South exterior	150 sq. ft.
		A-14B	South west exterior corner	
		A-14C	North East exterior corner	
A-17	Black window gasket	A-17A	South side exterior west	500 sq. ft.
		A-17B	NE exterior	
		A-17C	South side exterior east	
A-18	Main rolled roofing field w/ insulation	A-18A	Roof roof NE side	6,750 sq. ft.
		A-18B	SE eave	
		A-18C	Lower roof West side	
A-19	Roller roof curb	A-19A	Upper roof vent north of center	250 sq. ft.
		A-19B	SE HVAC unit AC-A1 lower roof	
		A-19C	West lower roof vent	
A-20	Black penetration mastic	A-20A	NE upper pipe penetration	10 sq. ft.
		A-20B	Lower roof SE pipe penetration	
		A-20C	NE lower roof vent penetration	

Relinquished By:

Received By:

Relinquished By:

Received By:

Signature:

Signature:

Signature:

Signature:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

J. Alexander
ANDREW APOSTOLU10/7/22
10/10/22 9:30



003052699

1220 Concord Avenue, Suite 450
Concord, CA 94520
P (925) 609-7224
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E-MAIL REPORT TO:		<input checked="" type="checkbox"/> tony.mikacich@terracon.com Project Manager		Asbestos Bulk Samples	
		<input checked="" type="checkbox"/> denise.wallin@terracon.com Project Assistant		PLM Analysis - Analyze all samples	
				EMLabPK TAT: 3-5 days	
Project #:	NA227079	Project Address:	1100 N Ham Lane, Lodi	Sampling Date:	10/05/2022 – 10/07/2022
Project Name:	LUSD Lakewood Elem School Pre-reno HazMat Survey			Sampled By:	J. Alexander & W. Renner
Building Name / Area:		Building A		Page ____ of ____	

HM#	Material Description	Quantity
Sample ID	Sample Location & Material Location	
S-21A	White Window Caulk	600 sq ft
S-21B	1104 east exterior window	
S-21C	1104 West exterior window	

HM#	Material Description:	Quantity
Sample ID	Sample Location & Material Location	
A		
B		
C		

HM#	Material Description:	Quantity
Sample ID	Sample Location & Material Location	
A		
B		
C		

HM#	Material Description:	Quantity
Sample ID	Sample Location & Material Location	
A		
B		
C		

HM#	Material Description:	Quantity
Sample ID	Sample Location & Material Location	
A		
B		
C		

Relinquished By:

J. Alexander

Signature:

Date/Time:

10/7/22

Received By:

ANDREW ARESTEGUI

Signature:

Date/Time:

10/10/22 7:30A

Relinquished By:

Signature:

Date/Time:

Received By:

Signature:

Date/Time:



003052672

1220 Concord Avenue, Suite 450

Concord, CA 94520

P (925) 609-7224

Terracon.com

E-MAIL REPORT TO:		<input checked="" type="checkbox"/> <u>tony.mikacich@terracon.com</u> Project Manager		Lead in Paint & Bulk Samples	
		<input checked="" type="checkbox"/> <u>denise.wallen@terracon.com</u> Project Assistant		FLAME AA Analysis / TTLC	
				EMLabPK TAT: 3-5 days	
Project #:	NA227079	Project Address:	1100 N Ham Lane, Lodi	Sampling Date:	10/05/2022 - 10/07/2022
Project Name:	LUSD Lakewood Elem School Pre-reno HazMat Survey			Sampled By:	J. Alexander & W. Renner
Building Name / Area:		Building A		Page <u>1</u> of <u>1</u>	

Sample #	Color:	Paint or Bulk	Size of Ceramic	Substrate	Component	Location	Condition (I/F/P)
Examples:		P or B	ie. 4"x4"	DW / Metal / Concrete / Stucco	Wall / Door / Frame / Sill		
Pb-A-01	light blue	Bulk	4"x4" wall	DW	wall	Girls restroom A107 behind door	I
Pb-A-02	light blue	B	1"x1" floor	concrete	floor	Girls restroom A107 at drain	I
Pb-A-03	Dark Green	B	1"x1" floor	ceramic	floor	Boys restroom A109 east floor	I
Pb-A-04	light green	B	4"x4" wall	ceramic	wall	Boys restroom A109 behind door	I
Pb-A-05	Brown	P	—	metal	duct	classroom A101 24" duct at ceiling	I
Pb-A-06	white	P	—	DW/wall paper	wall	Classroom A101 SE behind door	I
Pb-A-07	Beige	P	—	walls	roof wall	upper lower transition wall east	I
Pb-A-08	white	B	—	metal	Window Curlik	A102 west exterior window	I
Pb-							
Pb-							
Pb-							
Pb-							
Pb-							
Pb-							
Pb-							
Pb-							

Relinquished By:

JL Alexander

Signature:

Received By:

ANDREW ARESTEGUI

Signature:

Relinquished By:

Signature:

Received By:

Signature:

Date/Time:

10/7/22

Date/Time:

10/10/22 9:30 A

Date/Time:

Date/Time:

Report for:

Denise Wallen
Terracon Consultants, Inc. - Tustin, CA
23041 Avenida De La Carlota
Suite 350
Laguna Hills, CA 92653

Regarding: Eurofins EPK Built Environment Testing, LLC
Project: NA227079; LUSD Lakewood Elem School Pre-Reno HazMat Survey
EML ID: 3052690

Approved by:



Approved Signatory
Danny Li

Dates of Analysis:
Asbestos PLM: 10-17-2022

Service SOPs: Asbestos PLM (EPA 40CFR App E to Sub E of Part 763 & EPA METHOD 600/R-93-116, SOP EM-AS-S-1267)
NVLAP Lab Code 200757-0

All samples were received in acceptable condition unless noted in the Report Comments portion in the body of the report. The results relate only to the samples as received and tested. The results include an inherent uncertainty of measurement associated with estimating percentages by polarized light microscopy. Measurement uncertainty data for sample results with >1% asbestos concentration can be provided when requested.

Eurofins EPK Built Environment Testing, LLC ("the Company"), a member of the Eurofins Built Environment Testing group of companies, shall have no liability to the client or the client's customer with respect to decisions or recommendations made, actions taken or courses of conduct implemented by either the client or the client's customer as a result of or based upon the Test Results. In no event shall the Company be liable to the client with respect to the Test Results except for the Company's own willful misconduct or gross negligence nor shall the Company be liable for incidental or consequential damages or lost profits or revenues to the fullest extent such liability may be disclaimed by law, even if the Company has been advised of the possibility of such damages, lost profits or lost revenues. In no event shall the Company's liability with respect to the Test Results exceed the amount paid to the Company by the client therefor.

Client: Terracon Consultants, Inc. - Tustin, CA
C/O: Denise Wallen

Re: NA227079; LUSD Lakewood Elem School Pre-
Reno HazMat Survey

Date of Receipt: 10-10-2022
Date of Report: 10-17-2022

ASBESTOS PLM REPORT

Total Samples Submitted: 57

Total Samples Analyzed: 57

Total Samples with Layer Asbestos Content > 1%: 20

Location: B-1A, Mortar and Grout Associated w/ 4 in Light Blue Wall Tile; Girls Restroom B107 Behind Door

Lab ID-Version‡: 14724390-1

Sample Layers	Asbestos Content
Tan Texture	2% Chrysotile
Gray Grout	ND
White Mortar	ND
Sample Composite Homogeneity:	Moderate

Location: B-1B, Mortar and Grout Associated w/ 4 in Light Blue Wall Tile; Girls Restroom B107 Behind Door

Lab ID-Version‡: 14724391-1

Sample Layers	Asbestos Content
Tan Texture	2% Chrysotile
White Grout	ND
Gray Grout	ND
White Mortar	ND
Sample Composite Homogeneity:	Moderate

Location: B-2A, 1x2 ACT (Nailed In); B104 East Ceiling

Lab ID-Version‡: 14724392-1

Sample Layers	Asbestos Content
Brown Ceiling Tile with White Surface	ND
Composite Non-Asbestos Content:	98% Cellulose
Sample Composite Homogeneity:	Good

Location: B-2B, 1x2 ACT (Nailed In); B101 East Ceiling

Lab ID-Version‡: 14724393-1

Sample Layers	Asbestos Content
Brown Ceiling Tile with White Surface	ND
Composite Non-Asbestos Content:	98% Cellulose
Sample Composite Homogeneity:	Good

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‡ A "Version" indicated by "-x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

Client: Terracon Consultants, Inc. - Tustin, CA

C/O: Denise Wallen

Re: NA227079; LUSD Lakewood Elem School Pre-
Reno HazMat Survey

Date of Receipt: 10-10-2022

Date of Report: 10-17-2022

ASBESTOS PLM REPORT

Location: B-3A, Perimeter Wall Board; B105 SE Corner

Lab ID-Version‡: 14724394-1

Sample Layers	Asbestos Content
White Drywall with Brown Paper	ND
Composite Non-Asbestos Content:	10% Cellulose
Sample Composite Homogeneity:	Poor

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Client: Terracon Consultants, Inc. - Tustin, CA

C/O: Denise Wallen

Re: NA227079; LUSD Lakewood Elem School Pre-
Reno HazMat Survey

Date of Receipt: 10-10-2022

Date of Report: 10-17-2022

ASBESTOS PLM REPORT

Location: B-3B, Perimeter Wall Board; B102 NE Corner Wall

Lab ID-Version‡: 14724395-1

Sample Layers	Asbestos Content
White Wallpaper	ND
White Joint Compound	2% Chrysotile
Cream Tape	ND
White Joint Compound	2% Chrysotile
White Drywall with Brown Paper	ND
Composite Asbestos Fibrous Content:	< 1% Asbestos
Composite Non-Asbestos Content:	10% Cellulose
Sample Composite Homogeneity:	Poor

Comments: Composite asbestos content provided is only for Drywall/Joint compound. Composite content provided for this analysis has been performed by following the NESHAP guidelines.

Location: B-3C, Perimeter Wall Board; B103 West Wall

Lab ID-Version‡: 14724396-1

Sample Layers	Asbestos Content
White Wallpaper	ND
White Joint Compound	2% Chrysotile
Cream Tape	ND
White Joint Compound	2% Chrysotile
White Drywall with Brown Paper	ND
Composite Asbestos Fibrous Content:	< 1% Asbestos
Composite Non-Asbestos Content:	10% Cellulose
Sample Composite Homogeneity:	Poor

Comments: Composite asbestos content provided is only for Drywall/Joint compound. Composite content provided for this analysis has been performed by following the NESHAP guidelines.

Location: B-4A, Partition Wallboard; B105 NW Corner

Lab ID-Version‡: 14724397-1

Sample Layers	Asbestos Content
White Wallpaper	ND
White Joint Compound	2% Chrysotile
Cream Tape	ND
White Joint Compound	2% Chrysotile
White Drywall with Brown Paper	ND
Composite Asbestos Fibrous Content:	< 1% Asbestos
Composite Non-Asbestos Content:	10% Cellulose
Sample Composite Homogeneity:	Poor

Comments: Composite asbestos content provided is only for Drywall/Joint compound. Composite content provided for this analysis has been performed by following the NESHAP guidelines.

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Eurofins EPK Built Environment Testing, LLC

2841 Dow Avenue, Suite 300, Tustin, CA 92780

(866) 888-6653 www.eurofinsus.com/Built

Client: Terracon Consultants, Inc. - Tustin, CA

C/O: Denise Wallen

Re: NA227079; LUSD Lakewood Elem School Pre- Date of Receipt: 10-10-2022

Reno HazMat Survey Date of Report: 10-17-2022

ASBESTOS PLM REPORT**Location: B-4B, Partition Wallboard; B102 NE Corner Wall**

Lab ID-Version‡: 14724398-1

Sample Layers	Asbestos Content
White Joint Compound	2% Chrysotile
Cream Tape	ND
White Joint Compound	2% Chrysotile
White Drywall with Brown Paper	ND
Composite Asbestos Fibrous Content:	< 1% Asbestos
Composite Non-Asbestos Content:	10% Cellulose
Sample Composite Homogeneity:	Poor

Comments: Composite asbestos content provided is only for Drywall/Joint compound. Composite content provided for this analysis has been performed by following the NESHAP guidelines.

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Client: Terracon Consultants, Inc. - Tustin, CA

C/O: Denise Wallen

Re: NA227079; LUSD Lakewood Elem School Pre-
Reno HazMat Survey

Date of Receipt: 10-10-2022

Date of Report: 10-17-2022

ASBESTOS PLM REPORT

Location: B-4C, Partition Wallboard; B103 South Wall

Lab ID-Version‡: 14724399-1

Sample Layers	Asbestos Content
White Wallpaper	ND
White Joint Compound	2% Chrysotile
Cream Tape	ND
White Joint Compound	2% Chrysotile
White Drywall with Brown Paper	ND
Composite Asbestos Fibrous Content:	< 1% Asbestos
Composite Non-Asbestos Content:	10% Cellulose
Sample Composite Homogeneity:	Poor

Comments: Composite asbestos content provided is only for Drywall/Joint compound. Composite content provided for this analysis has been performed by following the NESHAP guidelines.

Location: B-5A, Mortar and Grout Associated w/ 1 in Blue Floor Tile; B107 at Drain

Lab ID-Version‡: 14724400-1

Sample Layers	Asbestos Content
Blue Tile	ND
Black Grout	ND
Black Mortar	ND
Sample Composite Homogeneity:	Moderate

Location: B-5B, Mortar and Grout Associated w/ 1 in Blue Floor Tile; B107 at Drain

Lab ID-Version‡: 14724401-1

Sample Layers	Asbestos Content
Blue Tile	ND
Black Grout	ND
Black Mortar	ND
Sample Composite Homogeneity:	Moderate

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(866) 888-6653 www.eurofinsus.com/Built

Client: Terracon Consultants, Inc. - Tustin, CA

C/O: Denise Wallen

Re: NA227079; LUSD Lakewood Elem School Pre- Date of Receipt: 10-10-2022

Reno HazMat Survey Date of Report: 10-17-2022

ASBESTOS PLM REPORT**Location: B-6A, Mortar and Grout Associated w/ 4 in Light Green Wall Tile; B109 at Entry**

Lab ID-Version‡: 14724402-1

Sample Layers	Asbestos Content
White Grout	ND
White Mortar	ND
Tan Texture	2% Chrysotile
Sample Composite Homogeneity:	Moderate

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Client: Terracon Consultants, Inc. - Tustin, CA

C/O: Denise Wallen

Re: NA227079; LUSD Lakewood Elem School Pre-
Reno HazMat Survey

Date of Receipt: 10-10-2022

Date of Report: 10-17-2022

ASBESTOS PLM REPORT

Location: B-6B, Mortar and Grout Associated w/ 4 in Light Green Wall Tile; B109 at Entry

Lab ID-Version‡: 14724403-1

Sample Layers	Asbestos Content
White Grout	ND
White Mortar	ND
Tan Texture	2% Chrysotile
Sample Composite Homogeneity: Moderate	

Location: B-7A, Base Cove w/ Yellow and Brown Mastic; B105 NW Corner Wall

Lab ID-Version‡: 14724404-1

Sample Layers	Asbestos Content
Gray Baseboard	ND
Yellow Mastic	ND
Brown Mastic	ND
Sample Composite Homogeneity: Moderate	

Location: B-7B, Base Cove w/ Yellow and Brown Mastic; B102 NE Corner

Lab ID-Version‡: 14724405-1

Sample Layers	Asbestos Content
Gray Baseboard	ND
Yellow Mastic	ND
Brown Mastic	ND
Sample Composite Homogeneity: Moderate	

Location: B-7C, Base Cove w/ Yellow and Brown Mastic; B103 South Wall

Lab ID-Version‡: 14724406-1

Sample Layers	Asbestos Content
Gray Baseboard	ND
Yellow Mastic	ND
Brown Mastic	ND
Sample Composite Homogeneity: Moderate	

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Client: Terracon Consultants, Inc. - Tustin, CA

C/O: Denise Wallen

Re: NA227079; LUSD Lakewood Elem School Pre-
Reno HazMat Survey

Date of Receipt: 10-10-2022

Date of Report: 10-17-2022

ASBESTOS PLM REPORT

Location: B-8A, Mortar and Grout Associated w/ 1 in Green Floor Tile; B109 at Drain

Lab ID-Version‡: 14724407-1

Sample Layers	Asbestos Content
Green Tile	ND
Black Grout	ND
Sample Composite Homogeneity:	Moderate

Comments: Mortar not detected.

Location: B-8B, Mortar and Grout Associated w/ 1 in Green Floor Tile; B109 at Drain

Lab ID-Version‡: 14724408-1

Sample Layers	Asbestos Content
Green Tile	ND
Black Grout	ND
Sample Composite Homogeneity:	Moderate

Comments: Mortar not detected.

Location: B-9A, Duct Putty Gray; B111 Central 24 in Duct

Lab ID-Version‡: 14724409-1

Sample Layers	Asbestos Content
Gray Putty	ND
Sample Composite Homogeneity:	Good

Location: B-9B, Duct Putty Gray; B111 Central 24 in Duct

Lab ID-Version‡: 14724410-1

Sample Layers	Asbestos Content
Gray Putty	ND
Sample Composite Homogeneity:	Good

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Client: Terracon Consultants, Inc. - Tustin, CA

C/O: Denise Wallen

Re: NA227079; LUSD Lakewood Elem School Pre-
Reno HazMat Survey

Date of Receipt: 10-10-2022

Date of Report: 10-17-2022

ASBESTOS PLM REPORT

Location: B-9C, Duct Putty Gray; B101 24 in Sealing Duct

Lab ID-Version‡: 14724411-1

Sample Layers	Asbestos Content
Gray Putty	ND
Sample Composite Homogeneity: Good	

Location: B-10A, White Duct Sealant; East Exterior 24 in Duct

Lab ID-Version‡: 14724412-1

Sample Layers	Asbestos Content
White Sealant	ND
Sample Composite Homogeneity: Good	

Location: B-10B, White Duct Sealant; East Exterior 24 in Duct

Lab ID-Version‡: 14724413-1

Sample Layers	Asbestos Content
White Sealant	ND
Sample Composite Homogeneity: Good	

Location: B-10C, White Duct Sealant; B111 4 in Round Duct

Lab ID-Version‡: 14724414-1

Sample Layers	Asbestos Content
White Sealant	ND
Sample Composite Homogeneity: Good	

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C/O: Denise Wallen

Re: NA227079; LUSD Lakewood Elem School Pre-
Reno HazMat Survey

Date of Receipt: 10-10-2022

Date of Report: 10-17-2022

ASBESTOS PLM REPORT

Location: B-11A, 9 in BFT w/ Black Mastic; B101 SW Corner

Lab ID-Version‡: 14724415-1

Sample Layers	Asbestos Content
Beige Floor Tile	3% Chrysotile
Black Mastic	2% Chrysotile
Sample Composite Homogeneity: Moderate	

Location: B-11B, 9 in BFT w/ Black Mastic; B105 SE Corner

Lab ID-Version‡: 14724416-1

Sample Layers	Asbestos Content
Beige Floor Tile	3% Chrysotile
Black Mastic	2% Chrysotile
Sample Composite Homogeneity: Moderate	

Location: B-11C, 9 in BFT w/ Black Mastic; B103 SE Corner

Lab ID-Version‡: 14724417-1

Sample Layers	Asbestos Content
Beige Floor Tile	3% Chrysotile
Black Mastic	2% Chrysotile
Sample Composite Homogeneity: Moderate	

Location: B-12A, Yellow Carpet Glue; B101 SW Corner

Lab ID-Version‡: 14724418-1

Sample Layers	Asbestos Content
Yellow Glue	ND
Sample Composite Homogeneity: Good	

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Client: Terracon Consultants, Inc. - Tustin, CA

C/O: Denise Wallen

Re: NA227079; LUSD Lakewood Elem School Pre-
Reno HazMat Survey

Date of Receipt: 10-10-2022

Date of Report: 10-17-2022

ASBESTOS PLM REPORT

Location: B-12B, Yellow Carpet Glue; B105 SE Corner

Lab ID-Version‡: 14724419-1

Sample Layers	Asbestos Content
Yellow Glue	ND
Sample Composite Homogeneity:	Good

Location: B-12C, Yellow Carpet Glue; B103 SE Corner

Lab ID-Version‡: 14724420-1

Sample Layers	Asbestos Content
Yellow Glue	ND
Sample Composite Homogeneity:	Good

Location: B-13A, White Sink Undercoat; B105 Sink

Lab ID-Version‡: 14724421-1

Sample Layers	Asbestos Content
Brown Sink Undercoating	ND
Sample Composite Homogeneity:	Good

Location: B-13B, White Sink Undercoat; B102 Sink

Lab ID-Version‡: 14724422-1

Sample Layers	Asbestos Content
Brown Sink Undercoating	ND
Sample Composite Homogeneity:	Good

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Client: Terracon Consultants, Inc. - Tustin, CA
C/O: Denise Wallen

Re: NA227079; LUSD Lakewood Elem School Pre-
Reno HazMat Survey

Date of Receipt: 10-10-2022
Date of Report: 10-17-2022

ASBESTOS PLM REPORT

Location: B-13C, White Sink Undercoat; B101 SE Sink

Lab ID-Version‡: 14724423-1

Sample Layers	Asbestos Content
Brown Sink Undercoating	ND
Sample Composite Homogeneity:	Good

Location: B-14A, Black Sink Undercoat; B106 Sink

Lab ID-Version‡: 14724424-1

Sample Layers	Asbestos Content
Black Sink Undercoating	2% Chrysotile
Sample Composite Homogeneity:	Good

Location: B-14B, Black Sink Undercoat; B106 Sink

Lab ID-Version‡: 14724425-1

Sample Layers	Asbestos Content
Black Sink Undercoating	2% Chrysotile
Sample Composite Homogeneity:	Good

Location: B-15A, Cove Drywall; Jon Cloud

Lab ID-Version‡: 14724426-1

Sample Layers	Asbestos Content
White Joint Compound	2% Chrysotile
White Drywall with Brown Paper	ND
Composite Asbestos Fibrous Content:	< 1% Asbestos
Composite Non-Asbestos Content:	10% Cellulose
Sample Composite Homogeneity:	Poor

Comments: Composite asbestos content provided is only for Drywall/Joint compound. Composite content provided for this analysis has been performed by following the NESHAP guidelines.

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‡ A "Version" indicated by "-x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

Client: Terracon Consultants, Inc. - Tustin, CA

C/O: Denise Wallen

Re: NA227079; LUSD Lakewood Elem School Pre-
Reno HazMat Survey

Date of Receipt: 10-10-2022

Date of Report: 10-17-2022

ASBESTOS PLM REPORT

Location: B-15B, Cove Drywall; B111 Ceiling at Entry

Lab ID-Version‡: 14724427-1

Sample Layers	Asbestos Content
White Joint Compound	2% Chrysotile
White Drywall with Brown Paper	ND
Composite Asbestos Fibrous Content:	< 1% Asbestos
Composite Non-Asbestos Content:	10% Cellulose
Sample Composite Homogeneity:	Poor

Comments: Composite asbestos content provided is only for Drywall/Joint compound. Composite content provided for this analysis has been performed by following the NESHAP guidelines.

Location: B-15C, Cove Drywall; B109 Ceiling at Entry

Lab ID-Version‡: 14724428-1

Sample Layers	Asbestos Content
White Joint Compound	2% Chrysotile
White Drywall with Brown Paper	ND
Composite Asbestos Fibrous Content:	< 1% Asbestos
Composite Non-Asbestos Content:	10% Cellulose
Sample Composite Homogeneity:	Poor

Comments: Composite asbestos content provided is only for Drywall/Joint compound. Composite content provided for this analysis has been performed by following the NESHAP guidelines.

Location: B-16A, Black Window Gasket; B103 Exterior Window

Lab ID-Version‡: 14724429-1

Sample Layers	Asbestos Content
Black Gasket	ND
Sample Composite Homogeneity:	Good

Location: B-16B, Black Window Gasket; B101 Exterior Window

Lab ID-Version‡: 14724430-1

Sample Layers	Asbestos Content
Black Gasket	ND
Sample Composite Homogeneity:	Good

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Eurofins EPK Built Environment Testing, LLC

2841 Dow Avenue, Suite 300, Tustin, CA 92780

(866) 888-6653 www.eurofinsus.com/Built

Client: Terracon Consultants, Inc. - Tustin, CA

C/O: Denise Wallen

Re: NA227079; LUSD Lakewood Elem School Pre- Date of Receipt: 10-10-2022

Reno HazMat Survey Date of Report: 10-17-2022

ASBESTOS PLM REPORT**Location: B-16C, Black Window Gasket; B105 Exterior Window**

Lab ID-Version‡: 14724431-1

Sample Layers	Asbestos Content
Black Gasket	ND
Sample Composite Homogeneity: Good	

Location: B-17A, Black Building Sealant; NE Exterior Corner

Lab ID-Version‡: 14724432-1

Sample Layers	Asbestos Content
Black Sealant	5% Chrysotile
Sample Composite Homogeneity: Good	

Location: B-17B, Black Building Sealant; East Side

Lab ID-Version‡: 14724433-1

Sample Layers	Asbestos Content
Black Sealant	5% Chrysotile
Sample Composite Homogeneity: Good	

Location: B-17C, Black Building Sealant; SE Exterior Corner

Lab ID-Version‡: 14724434-1

Sample Layers	Asbestos Content
Black Sealant	5% Chrysotile
Sample Composite Homogeneity: Good	

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Client: Terracon Consultants, Inc. - Tustin, CA

C/O: Denise Wallen

Re: NA227079; LUSD Lakewood Elem School Pre-
Reno HazMat Survey

Date of Receipt: 10-10-2022

Date of Report: 10-17-2022

ASBESTOS PLM REPORT

Location: B-18A, Main Rolled Roof Field; Upper Roof Center

Lab ID-Version‡: 14724435-1

Sample Layers	Asbestos Content
Black Roofing Shingle with Pebbles	ND
Black Roofing Tar and Felt	ND
Black Roofing Tar and Felt	ND
Composite Non-Asbestos Content:	45% Glass Fibers 25% Cellulose
Sample Composite Homogeneity:	Poor

Location: B-18B, Main Rolled Roof Field; Lower Roof N Side

Lab ID-Version‡: 14724436-1

Sample Layers	Asbestos Content
Black Roofing Shingle with Pebbles	ND
Black Roofing Tar and Felt	ND
Black Roofing Tar and Felt	ND
Composite Non-Asbestos Content:	45% Glass Fibers 25% Cellulose
Sample Composite Homogeneity:	Poor

Location: B-18C, Main Rolled Roof Field; Awning SW

Lab ID-Version‡: 14724437-1

Sample Layers	Asbestos Content
Black Roofing Shingle with Pebbles	ND
Black Roofing Tar and Felt	ND
Black Roofing Tar and Felt	ND
Composite Non-Asbestos Content:	45% Glass Fibers 25% Cellulose
Sample Composite Homogeneity:	Poor

Location: B-19A, Rolled Roof Curb; Upper Roof East Vent Penetration

Lab ID-Version‡: 14724438-1

Sample Layers	Asbestos Content
Black Roofing Tar	ND
Composite Non-Asbestos Content:	5% Cellulose
Sample Composite Homogeneity:	Good

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Client: Terracon Consultants, Inc. - Tustin, CA

C/O: Denise Wallen

Re: NA227079; LUSD Lakewood Elem School Pre-
Reno HazMat Survey

Date of Receipt: 10-10-2022

Date of Report: 10-17-2022

ASBESTOS PLM REPORT

Location: B-19B, Rolled Roof Curb; NW HVAC Unit

Lab ID-Version‡: 14724439-1

Sample Layers	Asbestos Content
Black Roofing Tar	ND
Composite Non-Asbestos Content:	5% Cellulose
Sample Composite Homogeneity:	Good

Location: B-19C, Rolled Roof Curb; Pipe Sleeper Curb South Side

Lab ID-Version‡: 14724440-1

Sample Layers	Asbestos Content
Black Roofing Tar	ND
Composite Non-Asbestos Content:	5% Cellulose
Sample Composite Homogeneity:	Good

Location: B-20A, Black Penetration Mastic; Upper Roof NE Pipe Insulation

Lab ID-Version‡: 14724441-1

Sample Layers	Asbestos Content
Black Roofing Mastic	ND
Composite Non-Asbestos Content:	5% Cellulose
Sample Composite Homogeneity:	Good

Location: B-20B, Black Penetration Mastic; Upper Roof N West Side Pipe Insulation

Lab ID-Version‡: 14724442-1

Sample Layers	Asbestos Content
Black Roofing Mastic	ND
Composite Non-Asbestos Content:	5% Cellulose
Sample Composite Homogeneity:	Good

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Client: Terracon Consultants, Inc. - Tustin, CA

C/O: Denise Wallen

Re: NA227079; LUSD Lakewood Elem School Pre-
Reno HazMat Survey

Date of Receipt: 10-10-2022

Date of Report: 10-17-2022

ASBESTOS PLM REPORT

Location: B-20C, Black Penetration Mastic; SE Pipe Penetration

Lab ID-Version‡: 14724443-1

Sample Layers	Asbestos Content
Black Roofing Mastic	ND
Composite Non-Asbestos Content:	5% Cellulose
Sample Composite Homogeneity:	Good

Location: B-21A, White Window Caulk; B103 West Exterior Window

Lab ID-Version‡: 14724444-1

Sample Layers	Asbestos Content
Gray Caulk	ND
Sample Composite Homogeneity:	Good

Location: B-21B, White Window Caulk; B101 North Exterior Window

Lab ID-Version‡: 14724445-1

Sample Layers	Asbestos Content
Gray Caulk	ND
Sample Composite Homogeneity:	Good

Location: B-21C, White Window Caulk; B101 North Exterior Window

Lab ID-Version‡: 14724446-1

Sample Layers	Asbestos Content
Gray Caulk	< 1% Chrysotile
Sample Composite Homogeneity:	Good

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Report for:

Denise Wallen
Terracon Consultants, Inc. - Tustin, CA
23041 Avenida De La Carlota
Suite 350
Laguna Hills, CA 92653

Regarding: Eurofins EPK Built Environment Testing, LLC
Project: NA227079; LUSD Lakewood Elem School Pre-Reno HazMat Survey
EML ID: 3052668

Approved by:



Approved Signatory
Danny Li

Dates of Analysis:
Asbestos PLM: 10-14-2022

Service SOPs: Asbestos PLM (EPA 40CFR App E to Sub E of Part 763 & EPA METHOD 600/R-93-116, SOP EM-AS-S-1267)
NVLAP Lab Code 200757-0

All samples were received in acceptable condition unless noted in the Report Comments portion in the body of the report. The results relate only to the samples as received and tested. The results include an inherent uncertainty of measurement associated with estimating percentages by polarized light microscopy. Measurement uncertainty data for sample results with >1% asbestos concentration can be provided when requested.

Eurofins EPK Built Environment Testing, LLC ("the Company"), a member of the Eurofins Built Environment Testing group of companies, shall have no liability to the client or the client's customer with respect to decisions or recommendations made, actions taken or courses of conduct implemented by either the client or the client's customer as a result of or based upon the Test Results. In no event shall the Company be liable to the client with respect to the Test Results except for the Company's own willful misconduct or gross negligence nor shall the Company be liable for incidental or consequential damages or lost profits or revenues to the fullest extent such liability may be disclaimed by law, even if the Company has been advised of the possibility of such damages, lost profits or lost revenues. In no event shall the Company's liability with respect to the Test Results exceed the amount paid to the Company by the client therefor.

Eurofins EPK Built Environment Testing, LLC

2841 Dow Avenue, Suite 300, Tustin, CA 92780

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Client: Terracon Consultants, Inc. - Tustin, CA

C/O: Denise Wallen

Re: NA227079; LUSD Lakewood Elem School Pre-
Reno HazMat Survey

Date of Receipt: 10-10-2022

Date of Report: 10-14-2022

ASBESTOS PLM REPORT**Total Samples Submitted:** 2**Total Samples Analyzed:** 2**Total Samples with Layer Asbestos Content > 1%:** 0**Location: Pb-B-06, White, B101 West Wall**

Lab ID-Version‡: 14730388-1

Sample Layers	Asbestos Content
White Wrap	ND
Composite Non-Asbestos Content:	75% Cellulose
Sample Composite Homogeneity:	Good

Location: Pb-B-07, Beige, Upper Lower Roof Transition Wall North

Lab ID-Version‡: 14730389-1

Sample Layers	Asbestos Content
Beige Wood	ND
Composite Non-Asbestos Content:	75% Cellulose
Sample Composite Homogeneity:	Good

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Report for:

Denise Wallen
Terracon Consultants, Inc. - Tustin, CA
23041 Avenida De La Carlota
Suite 350
Laguna Hills, CA 92653

Regarding: Eurofins EPK Built Environment Testing, LLC
Project: NA227079; LUSD Lakewood Elem School Pre-Reno HazMat Survey
EML ID: 3052690

Approved by:



Approved Signatory
Danny Li

Dates of Analysis:
Asbestos-EPA 400 point count: 11-16-2022

Service SOPs: Asbestos-EPA 400 point count (EPA 40CFR App E to Sub E of Part 763 & EPA METHOD 600/R-93-116, SOP EM-AS-S-1262)
NVLAP Lab Code 200757-0

All samples were received in acceptable condition unless noted in the Report Comments portion in the body of the report. Due to the nature of the analyses performed, field blank correction of results is not applied. The results relate only to the samples as received and tested.

Eurofins EPK Built Environment Testing, LLC ("the Company"), a member of the Eurofins Built Environment Testing group of companies, shall have no liability to the client or the client's customer with respect to decisions or recommendations made, actions taken or courses of conduct implemented by either the client or the client's customer as a result of or based upon the Test Results. In no event shall the Company be liable to the client with respect to the Test Results except for the Company's own willful misconduct or gross negligence nor shall the Company be liable for incidental or consequential damages or lost profits or revenues to the fullest extent such liability may be disclaimed by law, even if the Company has been advised of the possibility of such damages, lost profits or lost revenues. In no event shall the Company's liability with respect to the Test Results exceed the amount paid to the Company by the client therefor.

Client: Terracon Consultants, Inc. - Tustin, CA

C/O: Denise Wallen

Re: NA227079; LUSD Lakewood Elem School Pre-
 Reno HazMat Survey

Date of Receipt: 10-10-2022

Date of Report: 11-16-2022

ASBESTOS POINT COUNT REPORT

Location:	B-3B Perimeter Wall Board; B102 NE Corner Wall		
Total Points Counted:	400		
Lab ID-Version‡:	14867203-1		
Sample Layers	Asbestos Type	Asbestos Points Counted	Asbestos Concentration (%)
White Joint Compound with Drywall (Composite)	Chrysotile	0	< 0.25
Layer Totals:		0	NA

Comments: Asbestos was detected, but no points counted.

Location:	B-3C Perimeter Wall Board; B103 West Wall		
Total Points Counted:	400		
Lab ID-Version‡:	14867204-1		
Sample Layers	Asbestos Type	Asbestos Points Counted	Asbestos Concentration (%)
White Joint Compound with Drywall (Composite)	Chrysotile	0	< 0.25
Layer Totals:		0	NA

Comments: Asbestos was detected, but no points counted.

Location:	B-4A Partition Wallboard; B105 NW Corner		
Total Points Counted:	400		
Lab ID-Version‡:	14867205-1		
Sample Layers	Asbestos Type	Asbestos Points Counted	Asbestos Concentration (%)
White Joint Compound with Drywall (Composite)	Chrysotile	0	< 0.25
Layer Totals:		0	NA

Comments: Asbestos was detected, but no points counted.

The analytical sensitivity is 1 asbestos point. The limit of detection is 1 asbestos point divided by the total number of points counted and multiplied by 100.

The results relate only to the items tested. Interpretation is left to the company and/or persons who conducted the field work. The test report shall not be reproduced except in full, without written approval of the laboratory. The report must not be used by the client to claim product certification, approval, or endorsement by any agency of the federal government.

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Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.

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Client: Terracon Consultants, Inc. - Tustin, CA

C/O: Denise Wallen

Re: NA227079; LUSD Lakewood Elem School Pre-
 Reno HazMat Survey

Date of Receipt: 10-10-2022

Date of Report: 11-16-2022

ASBESTOS POINT COUNT REPORT

Location:	B-4B Partition Wallboard; B102 NE Corner Wall		
Total Points Counted:	400		
Lab ID-Version‡:	14867206-1		
Sample Layers	Asbestos Type	Asbestos Points Counted	Asbestos Concentration (%)
White Joint Compound with Drywall (Composite)	Chrysotile	0	< 0.25
Layer Totals:		0	NA

Comments: Asbestos was detected, but no points counted.

Location:	B-4C Partition Wallboard; B103 South Wall		
Total Points Counted:	400		
Lab ID-Version‡:	14867207-1		
Sample Layers	Asbestos Type	Asbestos Points Counted	Asbestos Concentration (%)
White Joint Compound with Drywall (Composite)	Chrysotile	0	< 0.25
Layer Totals:		0	NA

Comments: Asbestos was detected, but no points counted.

Location:	B-15A Cove Drywall; Jon Cloud		
Total Points Counted:	400		
Lab ID-Version‡:	14867208-1		
Sample Layers	Asbestos Type	Asbestos Points Counted	Asbestos Concentration (%)
White Joint Compound with Drywall (Composite)	Chrysotile	1	0.25
Layer Totals:		1	0.25

The analytical sensitivity is 1 asbestos point. The limit of detection is 1 asbestos point divided by the total number of points counted and multiplied by 100.

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Client: Terracon Consultants, Inc. - Tustin, CA

C/O: Denise Wallen

Re: NA227079; LUSD Lakewood Elem School Pre-
 Reno HazMat Survey

Date of Receipt: 10-10-2022

Date of Report: 11-16-2022

ASBESTOS POINT COUNT REPORT

Location:	B-15B Cove Drywall; B111 Ceiling at Entry		
Total Points Counted:	400		
Lab ID-Version‡:	14867209-1		
Sample Layers	Asbestos Type	Asbestos Points Counted	Asbestos Concentration (%)
White Joint Compound with Drywall (Composite)	Chrysotile	1	0.25
Layer Totals:		1	0.25

Location:	B-15C Cove Drywall; B109 Ceiling at Entry		
Total Points Counted:	400		
Lab ID-Version‡:	14867210-1		
Sample Layers	Asbestos Type	Asbestos Points Counted	Asbestos Concentration (%)
White Joint Compound with Drywall (Composite)	Chrysotile	0	< 0.25
Layer Totals:		0	NA

Comments: Asbestos was detected, but no points counted.

Location:	B-21C White Window Caulk; B101 North Exterior Window		
Total Points Counted:	400		
Lab ID-Version‡:	14867211-1		
Sample Layers	Asbestos Type	Asbestos Points Counted	Asbestos Concentration (%)
Gray Caulk	Chrysotile	0	< 0.25
Layer Totals:		0	NA

Comments: Asbestos was detected, but no points counted.

The analytical sensitivity is 1 asbestos point. The limit of detection is 1 asbestos point divided by the total number of points counted and multiplied by 100.

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003052690

1220 Concord Avenue, Suite 450

Concord, CA 94520

P (925) 609-7224

Terracon.com

E-MAIL REPORT TO:		<input checked="" type="checkbox"/> <u>tony.mikacich@terracon.com</u> Project Manager		Asbestos Bulk Samples	
		<input checked="" type="checkbox"/> <u>denise.wallin@terracon.com</u> Project Assistant		PLM Analysis - Analyze all samples	
				EMLabPK TAT: 3-5 days	
Project #:	NA227079	Project Address:	1100 N Ham Lane, Lodi	Sampling Date:	10/05/2022 - 10/07/2022
Project Name:	LUSD Lakewood Elem School Pre-reno HazMat Survey			Sampled By:	J. Alexander & W. Renner
Building Name / Area:			Building B	Page ____ of ____	

HM#	B-01	Material Description	Mortar and Grout associated w/ 4 in light blue wall tile	Quantity
Sample ID		Sample Location & Material Location		
B-1A		Girls restroom B107 behind door		350 sq. ft
B-1B		Girls restroom B107 behind door		
C				
HM#	B-02	Material Description:	1x2 ACT (nailed in)	Quantity
Sample ID		Sample Location & Material Location		
B-2A		tr B104 East ceiling		2,500 sq. ft
B-2B		B101 East ceiling		
C				
HM#	B-03	Material Description:	Perimeter wall board	Quantity
Sample ID		Sample Location & Material Location		
B-3A		B105 SE corner		2,400 sq. ft
B-3B		B102 NE corner wall		
B-3C		B103 West wall		
HM#	B-04	Material Description:	Partition Wallboard	Quantity
Sample ID		Sample Location & Material Location		
B-4A		B105 NW corner		2,400 sq. ft
B-4B		B102 NE corner wall		
B-4C		B103 South wall		
HM#	B-05	Material Description:	Mortar and Grout associated w/ 1 in blue floor tile	Quantity
Sample ID		Sample Location & Material Location		
B-5A		B107 at drain		200 sq. ft
B-5B		B107 at drain		
C				

Relinquished By:

J. Alexander
ANDREW ARESTEGUI

Signature:

Date/Time:

10/7/22

Received By:

Signature:

Date/Time:

10/10/22 9:30

Relinquished By:

Signature:

Date/Time:

Received By:

Signature:

Date/Time:



003052690

1220 Concord Avenue, Suite 450

Concord, CA 94520

P (925) 609-7224

Terracon.com

E-MAIL REPORT TO:		<input checked="" type="checkbox"/> tony.mikacich@terracon.com Project Manager		Asbestos Bulk Samples	
		<input checked="" type="checkbox"/> denise.wallin@terracon.com Project Assistant		PLM Analysis - Analyze all samples	
				EMLabPK TAT: 3-5 days	
Project #:	NA227079	Project Address:	1100 N Ham Lane, Lodi	Sampling Date:	10/05/2022 - 10/07/2022
Project Name:	LUSD Lakewood Elem School Pre-reno HazMat Survey			Sampled By:	J. Alexander & W. Renner
Building Name / Area:		Building 13		Page ____ of ____	

HM# B-06	Material Description	Mortar and Grout associated w/ 4" light green wall tile	
Sample ID	Sample Location & Material Location		Quantity
B-6A	B109 at entry		350 sq. ft
B-6B	B109 at entry		
C			
HM# B-07	Material Description:	Base coat w/ yellow and brown mastic	
Sample ID	Sample Location & Material Location		Quantity
B-7A	B105 NW corner wall		310 sq. ft
B-7B	B102 NE corner		
B-7C	B103 South wall		
HM# B-08	Material Description:	Mortar and Grout associated w/ 1" Green floor tile	
Sample ID	Sample Location & Material Location		Quantity
B-8A	B109 at drain		200 sq. ft
B-8B	B109 at drain		
C			
HM# B-09	Material Description:	duct Putty Gray	
Sample ID	Sample Location & Material Location		Quantity
B-9A	B111 Central 24" in duct		50 sq. ft
B-9B	B111 Central 24" in duct		
B-9C	B101 24" in ceiling duct		
HM# B-10	Material Description:	white duct sealant	
Sample ID	Sample Location & Material Location		Quantity
B-10A	East exterior 24" in duct		10 sq. ft
B-10B	East exterior 24" in duct		
B-10C	B111 4" in round duct		

Relinquished By:

J. Alexander

Signature:

Received By:

ANDREW ARESTEGUI

Signature:

Relinquished By:

Received By:

ANDREW ARESTEGUI

Signature:

Date/Time:

10/7/22

Date/Time:

Date/Time:

Date/Time:

10/10/22 9:30A



003052690

1220 Concord Avenue, Suite 450

Concord, CA 94520

P (925) 609-7224

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E-MAIL REPORT TO:		<input checked="" type="checkbox"/> tony.mikacich@terracon.com Project Manager		Asbestos Bulk Samples	
		<input checked="" type="checkbox"/> denise.wallen@terracon.com Project Assistant		PLM Analysis - Analyze all samples	
				EMLabPK TAT: 3-5 days	
Project #:	NA227079	Project Address:	1100 N Ham Lane, Lodi	Sampling Date:	10/05/2022 - 10/07/2022
Project Name:	LUSD Lakewood Elem School Pre-reno HazMat Survey			Sampled By:	J. Alexander & W. Renner
Building Name / Area:		Building B		Page ____ of ____	

HM#	B-11	Material Description	9 in BFT w/ black mastic	Quantity
Sample ID		Sample Location & Material Location		
B-11A	B101	SW corner		4,200 sq. ft
B-11B	B105	SE corner		
B-11C	B101	NE corner		
HM#	B-12	Material Description:	Yellow carpet glue	Quantity
Sample ID		Sample Location & Material Location		
B-12A	B101	SW corner		4,200 sq. ft
B-12B	B105	SE corner		
B-12C	B103	SE corner		
HM#	B-13	Material Description:	White sink undercoat	Quantity
Sample ID		Sample Location & Material Location		
B-13A	B105	Sink		30 sq. ft
B-13B	B103	Sink		
B-13C	B101	SE Sink		
HM#	B-14	Material Description:	Black Sink undercoat	Quantity
Sample ID		Sample Location & Material Location		
B-14A	B106	Sink		4 sq. ft
B-14B	B106	Sink		
C				
HM#	B-15	Material Description:	Core drywall	Quantity
Sample ID		Sample Location & Material Location		
B-15A	Jan closet	SE corner		500 sq. ft
B-15B	B111	Ceiling at entry		
B-15C	B109	Ceiling at entry		

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T. Aked

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		<input checked="" type="checkbox"/> denise.wallin@terracon.com Project Assistant		PLM Analysis - Analyze all samples	
				EMLabPK TAT: 3-5 days	
Project #:	NA227079	Project Address:	1100 N Ham Lane, Lodi	Sampling Date:	10/05/2022 – 10/07/2022
Project Name:	LUSD Lakewood Elem School Pre-reno HazMat Survey			Sampled By:	J. Alexander & W. Renner
Building Name / Area:			Building B	Page ____ of ____	

HM#	Material Description	Sample ID	Sample Location & Material Location	Quantity
B-14	Black window gasket			
B-14A	B103 exterior window			200 sq. ft.
B-14B	B101 exterior window			
B-14C	B105 exterior window			
B-17	Black building Sealant			
B-17A	NE exterior corner			150 ln. ft.
B-17B	East Side			
B-17C	SE exterior corner			
B-18	Main roller roof field			
B-18A	Upper roof center			6,750 sq. ft.
B-18B	Lower roof N side			
B-18C	Awning SW			
B-19	Roofed roof curb			
B-19A	Upper roof east vent penetration			250 sq. ft.
B-19B	NW HVAC unit			
B-19C	Pipe sleeper curb South side			
B-20	Black penetration mastic			
B-20A	Upper roof NE pipe penetration			10 sq. ft.
B-20B	Upper roof NW side pipe penetration			
B-20C	SE pipe penetration			

Relinquished By:

J. Alexander

Signature:

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10/10/22 7:30 A

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E-MAIL REPORT TO:		<input checked="" type="checkbox"/> tony.mikacich@terracon.com Project Manager		Asbestos Bulk Samples	
		<input checked="" type="checkbox"/> denise.wallin@terracon.com Project Assistant		PLM Analysis - Analyze all samples	
				EMLabPK TAT: 3-5 days	
Project #:	NA227079	Project Address:	1100 N Ham Lane, Lodi	Sampling Date:	10/05/2022 – 10/07/2022
Project Name:	LUSD Lakewood Elem School Pre-reno HazMat Survey			Sampled By:	J. Alexander & W. Renner
Building Name / Area:		Building B		Page ____ of ____	

HM#	Material Description	Quantity
Sample ID	Sample Location & Material Location	
B-21	White Window Curb	
B-21A	Blk 3 West exterior window	800 sq ft
B-21 B	Blk 4 North exterior window	
B-21C	Blk 4 North exterior window	

HM#	Material Description:	Quantity
Sample ID	Sample Location & Material Location	
A		
B		
C		

HM#	Material Description:	Quantity
Sample ID	Sample Location & Material Location	
A		
B		
C		

HM#	Material Description:	Quantity
Sample ID	Sample Location & Material Location	
A		
B		
C		

HM#	Material Description:	Quantity
Sample ID	Sample Location & Material Location	
A		
B		
C		

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E-MAIL REPORT TO:		<input checked="" type="checkbox"/> tony.mikacich@terracon.com Project Manager		Lead in Paint & Bulk Samples	
		<input checked="" type="checkbox"/> denise.wallen@terracon.com Project Assistant		FLAME AA Analysis / TTLC	
				EMLabPK TAT: 3-5 days	
Project #:	NA227079	Project Address:	1100 N Ham Lane, Lodi	Sampling Date:	10/05/2022 – 10/07/2022
Project Name:	LUSD Lakewood Elem School Pre-reno HazMat Survey			Sampled By:	J. Alexander & W. Renner
Building Name / Area:			Building B	Page 1 of 1	

Sample #	Color:	Paint or Bulk	Size of Ceramic	Substrate	Component	Location	Condition (I/F/P)
Examples:		P or B	ie. 4"x4"	DW / Metal / Concrete / Stucco	Wall / Door / Frame / Sill		
Pb-B-01	light blue	B	4" x 4"	DW concrete	wall	Girls restroom B107 behind door	I
Pb-B-02	blue	B	1" x 1"	marker/concrete	floor	B107 at drain	I
Pb-B-03	light green	B	4" x 4"	DW	wall	B109 at entry	I
Pb-B-04	green	B	1" x 1"	marker/concrete	floor	B109 at drain	I
Pb-B-05	Brown	P	—	metal	duct	B101 overhead 24" dia duct	I
Pb-B-06	white	P	—	dry wall/wall paper	wall	B101 west wall	I
Pb-B-07	Beige	P	—	wood	roof wall	upper lower roof transition wall work	I
Pb-B-08	white	B	—	metal	window frame	B103 west window	I
Pb-							
Pb-							
Pb-							
Pb-							
Pb-							
Pb-							
Pb-							

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J. Alex

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Report for:

Denise Wallen
Terracon Consultants, Inc. - Tustin, CA
23041 Avenida De La Carlota
Suite 350
Laguna Hills, CA 92653

Regarding: Eurofins EPK Built Environment Testing, LLC
Project: NA2277079; LUSD Lakewood Elem School Pre-Reno HazMat Survey
EML ID: 3052705

Approved by:



Approved Signatory
Danny Li

Dates of Analysis:
Asbestos PLM: 10-17-2022

Service SOPs: Asbestos PLM (EPA 40CFR App E to Sub E of Part 763 & EPA METHOD 600/R-93-116, SOP EM-AS-S-1267)
NVLAP Lab Code 200757-0

All samples were received in acceptable condition unless noted in the Report Comments portion in the body of the report. The results relate only to the samples as received and tested. The results include an inherent uncertainty of measurement associated with estimating percentages by polarized light microscopy. Measurement uncertainty data for sample results with >1% asbestos concentration can be provided when requested.

Eurofins EPK Built Environment Testing, LLC ("the Company"), a member of the Eurofins Built Environment Testing group of companies, shall have no liability to the client or the client's customer with respect to decisions or recommendations made, actions taken or courses of conduct implemented by either the client or the client's customer as a result of or based upon the Test Results. In no event shall the Company be liable to the client with respect to the Test Results except for the Company's own willful misconduct or gross negligence nor shall the Company be liable for incidental or consequential damages or lost profits or revenues to the fullest extent such liability may be disclaimed by law, even if the Company has been advised of the possibility of such damages, lost profits or lost revenues. In no event shall the Company's liability with respect to the Test Results exceed the amount paid to the Company by the client therefor.

Client: Terracon Consultants, Inc. - Tustin, CA

C/O: Denise Wallen

Re: NA2277079; LUSD Lakewood Elem School Pre- Date of Receipt: 10-10-2022

Reno HazMat Survey

Date of Report: 10-17-2022

ASBESTOS PLM REPORT

Total Samples Submitted: 60

Total Samples Analyzed: 60

Total Samples with Layer Asbestos Content > 1%: 15

Location: C-1A, Main Rolled Roof Field; Upper Roof Center

Lab ID-Version‡: 14724321-1

Sample Layers	Asbestos Content
Black Roofing Shingle with Pebbles	ND
Black Roofing Felt	ND
Composite Non-Asbestos Content:	30% Glass Fibers 20% Cellulose
Sample Composite Homogeneity:	Good

Location: C-1B, Main Rolled Roof Field; Lower Roof East Side

Lab ID-Version‡: 14724322-1

Sample Layers	Asbestos Content
Black Roofing Shingle with Pebbles	ND
Black Roofing Felt	ND
Composite Non-Asbestos Content:	30% Glass Fibers 20% Cellulose
Sample Composite Homogeneity:	Good

Location: C-1C, Main Rolled Roof Field; Awning NW Side

Lab ID-Version‡: 14724323-1

Sample Layers	Asbestos Content
Black Roofing Shingle with Pebbles	ND
Black Roofing Felt	ND
Composite Non-Asbestos Content:	30% Glass Fibers 20% Cellulose
Sample Composite Homogeneity:	Good

Location: C-2A, Rolled Roof Curb; Upper Roof South Vent

Lab ID-Version‡: 14724324-1

Sample Layers	Asbestos Content
Black Roofing Shingle with Pebbles	ND
Composite Non-Asbestos Content:	30% Glass Fibers 20% Synthetic Fibers
Sample Composite Homogeneity:	Good

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Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.

‡ A "Version" indicated by "-x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

Client: Terracon Consultants, Inc. - Tustin, CA

C/O: Denise Wallen

Re: NA2277079; LUSD Lakewood Elem School Pre- Date of Receipt: 10-10-2022

Reno HazMat Survey

Date of Report: 10-17-2022

ASBESTOS PLM REPORT

Location: C-2B, Rolled Roof Curb; Lower Roof East Vent

Lab ID-Version‡: 14724325-1

Sample Layers	Asbestos Content
Black Roofing Shingle with Pebbles	ND
Composite Non-Asbestos Content:	30% Glass Fibers 20% Synthetic Fibers
Sample Composite Homogeneity:	Good

Location: C-2C, Rolled Roof Curb; Lower Roof NW Vent

Lab ID-Version‡: 14724326-1

Sample Layers	Asbestos Content
Black Roofing Shingle with Pebbles	ND
Composite Non-Asbestos Content:	30% Glass Fibers 20% Synthetic Fibers
Sample Composite Homogeneity:	Good

Location: C-3A, Black Penetration Mastic; Upper Roof SE Penetration Pipe

Lab ID-Version‡: 14724327-1

Sample Layers	Asbestos Content
Black Mastic	ND
Sample Composite Homogeneity:	Good

Location: C-3B, Black Penetration Mastic; Lower Roof SE Penetration Pipe

Lab ID-Version‡: 14724328-1

Sample Layers	Asbestos Content
Black Mastic	ND
Sample Composite Homogeneity:	Good

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Client: Terracon Consultants, Inc. - Tustin, CA

C/O: Denise Wallen

Re: NA2277079; LUSD Lakewood Elem School Pre- Date of Receipt: 10-10-2022

Reno HazMat Survey

Date of Report: 10-17-2022

ASBESTOS PLM REPORT

Location: C-3C, Black Penetration Mastic; Lower Roof SW Penetration Pipe

Lab ID-Version‡: 14724329-1

Sample Layers	Asbestos Content
Black Mastic	ND
Sample Composite Homogeneity: Good	

Location: C-4A, Mortar and Grout Associated w/ Blue 1 in Ceramic Wall Tile; C107 at Drain

Lab ID-Version‡: 14724330-1

Sample Layers	Asbestos Content
Blue Ceramic Tile	ND
Brown Grout	ND
Gray Mortar	ND
Sample Composite Homogeneity: Good	

Location: C-4B, Mortar and Grout Associated w/ Blue 1 in Ceramic Wall Tile; C107 at Drain

Lab ID-Version‡: 14724331-1

Sample Layers	Asbestos Content
Blue Ceramic Tile	ND
Brown Grout	ND
Gray Mortar	ND
Sample Composite Homogeneity: Good	

Location: C-5A, Mortar and Grout Associated w/ Blue 4 in Ceramic Wall Tile; C107 by Entrance

Lab ID-Version‡: 14724332-1

Sample Layers	Asbestos Content
White Grout	ND
Gray Mortar	ND
Sample Composite Homogeneity: Good	

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Client: Terracon Consultants, Inc. - Tustin, CA

C/O: Denise Wallen

Re: NA2277079; LUSD Lakewood Elem School Pre- Date of Receipt: 10-10-2022

Reno HazMat Survey

Date of Report: 10-17-2022

ASBESTOS PLM REPORT

Location: C-5B, Mortar and Grout Associated w/ Blue 4 in Ceramic Wall Tile; C107 by Entrance

Lab ID-Version‡: 14724333-1

Sample Layers	Asbestos Content
White Grout	ND
Gray Mortar	ND
Sample Composite Homogeneity: Good	

Location: C-6A, Mortar and Grout Associated w/ Green 1 in Floor Tile; C109 at Entryway

Lab ID-Version‡: 14724334-1

Sample Layers	Asbestos Content
Green Ceramic Tile	ND
Gray Grout	ND
Gray Mortar	ND
Sample Composite Homogeneity: Good	

Location: C-6B, Mortar and Grout Associated w/ Green 1 in Floor Tile; C109 at Entryway

Lab ID-Version‡: 14724335-1

Sample Layers	Asbestos Content
Green Ceramic Tile	ND
Gray Grout	ND
Gray Mortar	ND
Sample Composite Homogeneity: Good	

Location: C-7A, Mortar and Grout Associated w/ 4 in Green Wall Tile; C109 Behind Door

Lab ID-Version‡: 14724336-1

Sample Layers	Asbestos Content
White Grout	ND
Gray Mortar	ND
Sample Composite Homogeneity: Good	

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C/O: Denise Wallen

Re: NA2277079; LUSD Lakewood Elem School Pre- Date of Receipt: 10-10-2022

Reno HazMat Survey

Date of Report: 10-17-2022

ASBESTOS PLM REPORT

Location: C-7B, Mortar and Grout Associated w/ 4 in Green Wall Tile; C109 Behind Door

Lab ID-Version‡: 14724337-1

Sample Layers	Asbestos Content
White Grout	ND
Gray Mortar	ND
Sample Composite Homogeneity: Good	

Location: C-8A, Grey Vinyl Sheet w/ Burlap and Yellow Glue; C101 SW Corner

Lab ID-Version‡: 14724338-1

Sample Layers	Asbestos Content
Gray Sheet Flooring with Fibrous Backing	ND
Yellow Glue	ND
Composite Non-Asbestos Content:	10% Cellulose
Sample Composite Homogeneity: Good	

Location: C-8B, Grey Vinyl Sheet w/ Burlap and Yellow Glue; C101 SW Corner

Lab ID-Version‡: 14724339-1

Sample Layers	Asbestos Content
Gray Sheet Flooring with Fibrous Backing	ND
Yellow Glue	ND
Composite Non-Asbestos Content:	10% Cellulose
Sample Composite Homogeneity: Good	

Location: C-8C, Grey Vinyl Sheet w/ Burlap and Yellow Glue; C101 South Wall

Lab ID-Version‡: 14724340-1

Sample Layers	Asbestos Content
Gray Sheet Flooring with Fibrous Backing	ND
Yellow Glue	ND
Composite Non-Asbestos Content:	10% Cellulose
Sample Composite Homogeneity: Good	

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Client: Terracon Consultants, Inc. - Tustin, CA

C/O: Denise Wallen

Re: NA2277079; LUSD Lakewood Elem School Pre- Date of Receipt: 10-10-2022

Reno HazMat Survey

Date of Report: 10-17-2022

ASBESTOS PLM REPORT

Location: C-9A, 9" VFT w/ Black Mastic; C101 North Wall

Lab ID-Version‡: 14724341-1

Sample Layers	Asbestos Content
Tan Floor Tile	3% Chrysotile
Black Mastic	5% Chrysotile
Sample Composite Homogeneity: Good	

Location: C-9B, 9" VFT w/ Black Mastic; C103 SE Corner

Lab ID-Version‡: 14724342-1

Sample Layers	Asbestos Content
Tan Floor Tile	3% Chrysotile
Black Mastic	5% Chrysotile
Sample Composite Homogeneity: Good	

Location: C-9C, 9" VFT w/ Black Mastic; C104 NE Corner

Lab ID-Version‡: 14724343-1

Sample Layers	Asbestos Content
Tan Floor Tile	3% Chrysotile
Black Mastic	5% Chrysotile
Sample Composite Homogeneity: Good	

Location: C-10A, Yellow Carpet Adhesive; C101 North Wall

Lab ID-Version‡: 14724344-1

Sample Layers	Asbestos Content
Yellow Carpet Adhesive	ND
Sample Composite Homogeneity: Good	

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Client: Terracon Consultants, Inc. - Tustin, CA

C/O: Denise Wallen

Re: NA2277079; LUSD Lakewood Elem School Pre- Date of Receipt: 10-10-2022

Reno HazMat Survey

Date of Report: 10-17-2022

ASBESTOS PLM REPORT

Location: C-10B, Yellow Carpet Adhesive; C104 NE Corner

Lab ID-Version‡: 14724345-1

Sample Layers	Asbestos Content
Yellow Carpet Adhesive	ND
Sample Composite Homogeneity:	Good

Location: C-10C, Yellow Carpet Adhesive; C102 North Wall

Lab ID-Version‡: 14724346-1

Sample Layers	Asbestos Content
Yellow Carpet Adhesive	ND
Sample Composite Homogeneity:	Good

Location: C-11A, Perimeter Drywall w/ Joint Compound; C101 SW Door

Lab ID-Version‡: 14724347-1

Sample Layers	Asbestos Content
Off-White Joint Compound	2% Chrysotile
White Drywall	ND
Composite Asbestos Fibrous Content:	< 1% Asbestos
Composite Non-Asbestos Content:	5% Cellulose
Sample Composite Homogeneity:	Good

Comments: Composite asbestos content provided is only for Drywall/Joint compound. Composite content provided for this analysis has been performed by following the NESHAP guidelines.

Location: C-11B, Perimeter Drywall w/ Joint Compound; C104 NE Door

Lab ID-Version‡: 14724348-1

Sample Layers	Asbestos Content
Off-White Joint Compound	2% Chrysotile
White Drywall	ND
Composite Asbestos Fibrous Content:	< 1% Asbestos
Composite Non-Asbestos Content:	5% Cellulose
Sample Composite Homogeneity:	Good

Comments: Composite asbestos content provided is only for Drywall/Joint compound. Composite content provided for this analysis has been performed by following the NESHAP guidelines.

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Client: Terracon Consultants, Inc. - Tustin, CA

C/O: Denise Wallen

Re: NA2277079; LUSD Lakewood Elem School Pre- Date of Receipt: 10-10-2022

Reno HazMat Survey

Date of Report: 10-17-2022

ASBESTOS PLM REPORT

Location: C-11C, Perimeter Drywall w/ Joint Compound; C105 SE Door

Lab ID-Version‡: 14724349-1

Sample Layers	Asbestos Content
Off-White Joint Compound	2% Chrysotile
Tan Adhesive	ND
White Drywall	ND
Composite Asbestos Fibrous Content:	< 1% Asbestos
Composite Non-Asbestos Content:	5% Cellulose
Sample Composite Homogeneity:	Good

Comments: Composite asbestos content provided is only for Drywall/Joint compound. Composite content provided for this analysis has been performed by following the NESHAP guidelines.

Location: C-12A, 4 in Cove Base w/ Brown Glue; C101 SW Door

Lab ID-Version‡: 14724350-1

Sample Layers	Asbestos Content
Brown Baseboard	ND
Brown Glue	ND
Sample Composite Homogeneity:	Good

Location: C-12B, 4 in Cove Base w/ Brown Glue; C104 NE Door

Lab ID-Version‡: 14724351-1

Sample Layers	Asbestos Content
Brown Baseboard	ND
Brown Glue	ND
Sample Composite Homogeneity:	Good

Location: C-12C, 4 in Cove Base w/ Brown Glue; C103 NW Door

Lab ID-Version‡: 14724352-1

Sample Layers	Asbestos Content
Brown Baseboard	ND
Brown Glue	ND
Sample Composite Homogeneity:	Good

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Client: Terracon Consultants, Inc. - Tustin, CA

C/O: Denise Wallen

Re: NA2277079; LUSD Lakewood Elem School Pre- Date of Receipt: 10-10-2022

Reno HazMat Survey

Date of Report: 10-17-2022

ASBESTOS PLM REPORT

Location: C-13A, White Sink Undercoat; C101 at Sink

Lab ID-Version‡: 14724353-1

Sample Layers	Asbestos Content
White Sink Undercoating	ND
Sample Composite Homogeneity:	Good

Location: C-13B, White Sink Undercoat; C104 Sink

Lab ID-Version‡: 14724354-1

Sample Layers	Asbestos Content
White Sink Undercoating	ND
Sample Composite Homogeneity:	Good

Location: C-13C, White Sink Undercoat; C105 Sink

Lab ID-Version‡: 14724355-1

Sample Layers	Asbestos Content
White Sink Undercoating	ND
Sample Composite Homogeneity:	Good

Location: C-14A, Cove Drywall; Jan Closet

Lab ID-Version‡: 14724356-1

Sample Layers	Asbestos Content
White Joint Compound with Paint	2% Chrysotile
Cream Tape	ND
White Joint Compound	2% Chrysotile
White Drywall	ND
Composite Asbestos Fibrous Content:	< 1% Asbestos
Composite Non-Asbestos Content:	10% Cellulose
Sample Composite Homogeneity:	Moderate

Comments: Composite asbestos content provided is only for Drywall/Joint compound. Composite content provided for this analysis has been performed by following the NESHAP guidelines.

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Client: Terracon Consultants, Inc. - Tustin, CA

C/O: Denise Wallen

Re: NA2277079; LUSD Lakewood Elem School Pre- Date of Receipt: 10-10-2022

Reno HazMat Survey

Date of Report: 10-17-2022

ASBESTOS PLM REPORT

Location: C-14B, Cove Drywall; Mech Room Ceiling

Lab ID-Version‡: 14724357-1

Sample Layers	Asbestos Content
White Joint Compound with Paint	ND
Cream Tape	ND
White Joint Compound	ND
White Drywall	ND
Composite Non-Asbestos Content:	10% Cellulose
Sample Composite Homogeneity:	Moderate

Location: C-14C, Cove Drywall; Mech Room Ceiling

Lab ID-Version‡: 14724358-1

Sample Layers	Asbestos Content
White Joint Compound with Paint	ND
Cream Tape	ND
White Joint Compound	ND
White Drywall	ND
Composite Non-Asbestos Content:	10% Cellulose
Sample Composite Homogeneity:	Moderate

Location: C-15A, Gray Duct Putty Tape; Mech Room

Lab ID-Version‡: 14724359-1

Sample Layers	Asbestos Content
Gray Non-Fibrous Material (Duct Putty)	ND
Sample Composite Homogeneity:	Good

Location: C-15B, Gray Duct Putty Tape; Mech Room

Lab ID-Version‡: 14724360-1

Sample Layers	Asbestos Content
Gray Non-Fibrous Material (Duct Putty)	ND
Sample Composite Homogeneity:	Good

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Client: Terracon Consultants, Inc. - Tustin, CA

C/O: Denise Wallen

Re: NA2277079; LUSD Lakewood Elem School Pre- Date of Receipt: 10-10-2022

Reno HazMat Survey

Date of Report: 10-17-2022

ASBESTOS PLM REPORT

Location: C-15C, Gray Duct Putty Tape; South Exterior HVAC Duct

Lab ID-Version‡: 14724361-1

Sample Layers	Asbestos Content
Gray Non-Fibrous Material (Duct Putty)	ND
Sample Composite Homogeneity: Good	

Location: C-16A, White Duct Sealant; South Exterior HVAC Duct

Lab ID-Version‡: 14724362-1

Sample Layers	Asbestos Content
White Sealant	ND
Sample Composite Homogeneity: Good	

Location: C-16B, White Duct Sealant; South Exterior HVAC Duct

Lab ID-Version‡: 14724363-1

Sample Layers	Asbestos Content
White Sealant	ND
Sample Composite Homogeneity: Good	

Location: C-16C, White Duct Sealant; Mech Room Round Duct

Lab ID-Version‡: 14724364-1

Sample Layers	Asbestos Content
White Sealant	ND
Sample Composite Homogeneity: Good	

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Client: Terracon Consultants, Inc. - Tustin, CA

C/O: Denise Wallen

Re: NA2277079; LUSD Lakewood Elem School Pre- Date of Receipt: 10-10-2022

Reno HazMat Survey

Date of Report: 10-17-2022

ASBESTOS PLM REPORT

Location: C-17A, Black Sink Undercoat; Teacher's Lounge Sink

Lab ID-Version‡: 14724365-1

Sample Layers	Asbestos Content
Black Sink Undercoating	2% Chrysotile
Sample Composite Homogeneity:	Good

Location: C-17B, Black Sink Undercoat; Teacher's Lounge Sink

Lab ID-Version‡: 14724366-1

Sample Layers	Asbestos Content
Black Sink Undercoating	2% Chrysotile
Sample Composite Homogeneity:	Good

Location: C-18A, 1x2 Acoustic Ceiling Tile; Teacher's Lounge

Lab ID-Version‡: 14724367-1

Sample Layers	Asbestos Content
White Ceiling Tile	ND
Composite Non-Asbestos Content:	90% Cellulose
Sample Composite Homogeneity:	Good

Location: C-18B, 1x2 Acoustic Ceiling Tile; Hallway Outside Girls Bathroom

Lab ID-Version‡: 14724368-1

Sample Layers	Asbestos Content
White Ceiling Tile	ND
Composite Non-Asbestos Content:	90% Cellulose
Sample Composite Homogeneity:	Good

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Client: Terracon Consultants, Inc. - Tustin, CA

C/O: Denise Wallen

Re: NA2277079; LUSD Lakewood Elem School Pre- Date of Receipt: 10-10-2022

Reno HazMat Survey

Date of Report: 10-17-2022

ASBESTOS PLM REPORT

Location: C-19A, Partition Drywall w/ Joint Compound; C103 Entry to Room C101

Lab ID-Version‡: 14724369-1

Sample Layers	Asbestos Content
Off-White Joint Compound	2% Chrysotile
White Drywall	ND
Composite Asbestos Fibrous Content:	< 1% Asbestos
Composite Non-Asbestos Content:	5% Cellulose
Sample Composite Homogeneity:	Good

Comments: Composite asbestos content provided is only for Drywall/Joint compound. Composite content provided for this analysis has been performed by following the NESHAP guidelines.

Location: C-19B, Partition Drywall w/ Joint Compound; C103.1 Entry to Room C105

Lab ID-Version‡: 14724370-1

Sample Layers	Asbestos Content
Off-White Joint Compound	2% Chrysotile
White Drywall	ND
Composite Asbestos Fibrous Content:	< 1% Asbestos
Composite Non-Asbestos Content:	5% Cellulose
Sample Composite Homogeneity:	Good

Comments: Composite asbestos content provided is only for Drywall/Joint compound. Composite content provided for this analysis has been performed by following the NESHAP guidelines.

Location: C-19C, Partition Drywall w/ Joint Compound; C103.1 N Entry Door

Lab ID-Version‡: 14724371-1

Sample Layers	Asbestos Content
Off-White Joint Compound	2% Chrysotile
White Drywall	ND
Composite Asbestos Fibrous Content:	< 1% Asbestos
Composite Non-Asbestos Content:	5% Cellulose
Sample Composite Homogeneity:	Good

Comments: Composite asbestos content provided is only for Drywall/Joint compound. Composite content provided for this analysis has been performed by following the NESHAP guidelines.

Location: C-20A, Black Window Gasket; C103 N Exterior Windows

Lab ID-Version‡: 14724372-1

Sample Layers	Asbestos Content
Black Gasket	ND
Sample Composite Homogeneity:	Good

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Client: Terracon Consultants, Inc. - Tustin, CA

C/O: Denise Wallen

Re: NA2277079; LUSD Lakewood Elem School Pre- Date of Receipt: 10-10-2022

Reno HazMat Survey

Date of Report: 10-17-2022

ASBESTOS PLM REPORT

Location: C-20B, Black Window Gasket; C104 E Exterior Windows

Lab ID-Version‡: 14724373-1

Sample Layers	Asbestos Content
Black Gasket	ND
Sample Composite Homogeneity: Good	

Location: C-20C, Black Window Gasket; C102 W Exterior Windows

Lab ID-Version‡: 14724374-1

Sample Layers	Asbestos Content
Black Gasket	ND
Sample Composite Homogeneity: Good	

Location: C-21A, White Window Caulk; C103 N Exterior Window

Lab ID-Version‡: 14724375-1

Sample Layers	Asbestos Content
White Caulk	ND
Sample Composite Homogeneity: Good	

Location: C-21B, White Window Caulk; C104 E Exterior Window

Lab ID-Version‡: 14724376-1

Sample Layers	Asbestos Content
White Caulk	ND
Sample Composite Homogeneity: Good	

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Client: Terracon Consultants, Inc. - Tustin, CA

C/O: Denise Wallen

Re: NA2277079; LUSD Lakewood Elem School Pre- Date of Receipt: 10-10-2022

Reno HazMat Survey

Date of Report: 10-17-2022

ASBESTOS PLM REPORT

Location: C-21C, White Window Caulk; C102 W Exterior Window

Lab ID-Version‡: 14724377-1

Sample Layers	Asbestos Content
White Caulk	ND
Sample Composite Homogeneity: Good	

Location: C-22A, Black Building Sealant; SW Exterior Corner

Lab ID-Version‡: 14724378-1

Sample Layers	Asbestos Content
Black Sealant	5% Chrysotile
Sample Composite Homogeneity: Good	

Location: C-22B, Black Building Sealant; SE Exterior Corner

Lab ID-Version‡: 14724379-1

Sample Layers	Asbestos Content
Black Sealant	5% Chrysotile
Sample Composite Homogeneity: Good	

Location: C-22C, Black Building Sealant; S Exterior

Lab ID-Version‡: 14724380-1

Sample Layers	Asbestos Content
Black Sealant	5% Chrysotile
Sample Composite Homogeneity: Good	

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Report for:

Denise Wallen
Terracon Consultants, Inc. - Tustin, CA
23041 Avenida De La Carlota
Suite 350
Laguna Hills, CA 92653

Regarding: Eurofins EPK Built Environment Testing, LLC
Project: NA227079; LUSD Lakewood Elem School Pre-Reno HazMat Survey
EML ID: 3052678

Approved by:



Approved Signatory
Danny Li

Dates of Analysis:
Asbestos PLM: 10-14-2022

Service SOPs: Asbestos PLM (EPA 40CFR App E to Sub E of Part 763 & EPA METHOD 600/R-93-116, SOP EM-AS-S-1267)
NVLAP Lab Code 200757-0

All samples were received in acceptable condition unless noted in the Report Comments portion in the body of the report. The results relate only to the samples as received and tested. The results include an inherent uncertainty of measurement associated with estimating percentages by polarized light microscopy. Measurement uncertainty data for sample results with >1% asbestos concentration can be provided when requested.

Eurofins EPK Built Environment Testing, LLC ("the Company"), a member of the Eurofins Built Environment Testing group of companies, shall have no liability to the client or the client's customer with respect to decisions or recommendations made, actions taken or courses of conduct implemented by either the client or the client's customer as a result of or based upon the Test Results. In no event shall the Company be liable to the client with respect to the Test Results except for the Company's own willful misconduct or gross negligence nor shall the Company be liable for incidental or consequential damages or lost profits or revenues to the fullest extent such liability may be disclaimed by law, even if the Company has been advised of the possibility of such damages, lost profits or lost revenues. In no event shall the Company's liability with respect to the Test Results exceed the amount paid to the Company by the client therefor.

Eurofins EPK Built Environment Testing, LLC

2841 Dow Avenue, Suite 300, Tustin, CA 92780

(866) 888-6653 www.eurofinsus.com/Built

Client: Terracon Consultants, Inc. - Tustin, CA

C/O: Denise Wallen

Re: NA227079; LUSD Lakewood Elem School Pre- Date of Receipt: 10-10-2022

Reno HazMat Survey Date of Report: 10-14-2022

ASBESTOS PLM REPORT**Total Samples Submitted:** 2**Total Samples Analyzed:** 2**Total Samples with Layer Asbestos Content > 1%:** 0**Location: Pb-C-01, Beige, Upper Lower Wall Transition Wall East**

Lab ID-Version‡: 14730393-1

Sample Layers	Asbestos Content
Beige Paint	ND
Sample Composite Homogeneity:	Good

Location: Pb-C-09, White, C101 E by Door

Lab ID-Version‡: 14730394-1

Sample Layers	Asbestos Content
White Paint	ND
White Semi-Fibrous Material	ND
Composite Non-Asbestos Content:	20% Synthetic Fibers
Sample Composite Homogeneity:	Moderate

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Report for:

Denise Wallen
Terracon Consultants, Inc. - Tustin, CA
23041 Avenida De La Carlota
Suite 350
Laguna Hills, CA 92653

Regarding: Eurofins EPK Built Environment Testing, LLC
Project: NA2277079; LUSD Lakewood Elem School Pre-Reno HazMat Survey
EML ID: 3052705

Approved by:



Approved Signatory
Danny Li

Dates of Analysis:

Asbestos-EPA 400 point count: 11-16-2022

Service SOPs: Asbestos-EPA 400 point count (EPA 40CFR App E to Sub E of Part 763 & EPA METHOD 600/R-93-116, SOP EM-AS-S-1262)
NVLAP Lab Code 200757-0

All samples were received in acceptable condition unless noted in the Report Comments portion in the body of the report. Due to the nature of the analyses performed, field blank correction of results is not applied. The results relate only to the samples as received and tested.

Eurofins EPK Built Environment Testing, LLC ("the Company"), a member of the Eurofins Built Environment Testing group of companies, shall have no liability to the client or the client's customer with respect to decisions or recommendations made, actions taken or courses of conduct implemented by either the client or the client's customer as a result of or based upon the Test Results. In no event shall the Company be liable to the client with respect to the Test Results except for the Company's own willful misconduct or gross negligence nor shall the Company be liable for incidental or consequential damages or lost profits or revenues to the fullest extent such liability may be disclaimed by law, even if the Company has been advised of the possibility of such damages, lost profits or lost revenues. In no event shall the Company's liability with respect to the Test Results exceed the amount paid to the Company by the client therefor.

Client: Terracon Consultants, Inc. - Tustin, CA

C/O: Denise Wallen

Re: NA2277079; LUSD Lakewood Elem School Pre- Date of Receipt: 10-10-2022

Reno HazMat Survey

Date of Report: 11-16-2022

ASBESTOS POINT COUNT REPORT

Location:	C-11A Perimeter Drywall w/ Joint Compound; C101 SW Door		
Total Points Counted:	400		
Lab ID-Version‡:	14867263-1		
Sample Layers	Asbestos Type	Asbestos Points Counted	Asbestos Concentration (%)
White Joint Compound with Drywall (Composite)	Chrysotile	0	< 0.25
Layer Totals:		0	NA

Comments: Asbestos was detected, but no points counted.

Location:	C-11B Perimeter Drywall w/ Joint Compound; C104 NE Door		
Total Points Counted:	400		
Lab ID-Version‡:	14867264-1		
Sample Layers	Asbestos Type	Asbestos Points Counted	Asbestos Concentration (%)
White Joint Compound with Drywall (Composite)	Chrysotile	1	0.25
Layer Totals:		1	0.25

Location:	C-11C Perimeter Drywall w/ Joint Compound; C105 SE Door		
Total Points Counted:	400		
Lab ID-Version‡:	14867265-1		
Sample Layers	Asbestos Type	Asbestos Points Counted	Asbestos Concentration (%)
White Joint Compound with Drywall (Composite)	Chrysotile	0	< 0.25
Layer Totals:		0	NA

Comments: Asbestos was detected, but no points counted.

The analytical sensitivity is 1 asbestos point. The limit of detection is 1 asbestos point divided by the total number of points counted and multiplied by 100.

The results relate only to the items tested. Interpretation is left to the company and/or persons who conducted the field work. The test report shall not be reproduced except in full, without written approval of the laboratory. The report must not be used by the client to claim product certification, approval, or endorsement by any agency of the federal government.

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Client: Terracon Consultants, Inc. - Tustin, CA

C/O: Denise Wallen

Re: NA2277079; LUSD Lakewood Elem School Pre- Date of Receipt: 10-10-2022

Reno HazMat Survey

Date of Report: 11-16-2022

ASBESTOS POINT COUNT REPORT

Location:	C-14A Cove Drywall; Jan Closet		
Total Points Counted:	400		
Lab ID-Version‡:	14867266-1		
Sample Layers	Asbestos Type	Asbestos Points Counted	Asbestos Concentration (%)
White Joint Compound with Drywall (Composite)	Chrysotile	3	0.75
Layer Totals:		3	0.75

Location:	C-14B Cove Drywall; Mech Room Ceiling		
Total Points Counted:	400		
Lab ID-Version‡:	14867267-1		
Sample Layers	Asbestos Type	Asbestos Points Counted	Asbestos Concentration (%)
White Joint Compound with Drywall (Composite)	Chrysotile	0	< 0.25
Layer Totals:		0	NA

Comments: Asbestos was detected, but no points counted.

Location:	C-14C Cove Drywall; Mech Room Ceiling		
Total Points Counted:	400		
Lab ID-Version‡:	14867268-1		
Sample Layers	Asbestos Type	Asbestos Points Counted	Asbestos Concentration (%)
White Joint Compound with Drywall (Composite)	Chrysotile	1	0.25
Layer Totals:		1	0.25

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Client: Terracon Consultants, Inc. - Tustin, CA

C/O: Denise Wallen

Re: NA2277079; LUSD Lakewood Elem School Pre- Date of Receipt: 10-10-2022

Reno HazMat Survey

Date of Report: 11-16-2022

ASBESTOS POINT COUNT REPORT

Location:	C-19A Partition Drywall w/ Joint Compound; C103 Entry to Room C101		
Total Points Counted:	400		
Lab ID-Version‡:	14867269-1		
Sample Layers	Asbestos Type	Asbestos Points Counted	Asbestos Concentration (%)
White Joint Compound with Drywall (Composite)	Chrysotile	0	< 0.25
Layer Totals:		0	NA

Comments: Asbestos was detected, but no points counted.

Location:	C-19B Partition Drywall w/ Joint Compound; C103.1 Entry to Room C105		
Total Points Counted:	400		
Lab ID-Version‡:	14867270-1		
Sample Layers	Asbestos Type	Asbestos Points Counted	Asbestos Concentration (%)
White Joint Compound with Drywall (Composite)	Chrysotile	0	< 0.25
Layer Totals:		0	NA

Comments: Asbestos was detected, but no points counted.

Location:	C-19C Partition Drywall w/ Joint Compound; C103.1 N Entry Door		
Total Points Counted:	400		
Lab ID-Version‡:	14867271-1		
Sample Layers	Asbestos Type	Asbestos Points Counted	Asbestos Concentration (%)
White Joint Compound with Drywall (Composite)	Chrysotile	0	< 0.25
Layer Totals:		0	NA

Comments: Asbestos was detected, but no points counted.

The analytical sensitivity is 1 asbestos point. The limit of detection is 1 asbestos point divided by the total number of points counted and multiplied by 100.

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003052705

1220 Concord Avenue, Suite 450

Concord, CA 94520

P (925) 609-7224

Terracon.com

E-MAIL REPORT TO:		<input checked="" type="checkbox"/> tony.mikacich@terracon.com Project Manager		Asbestos Bulk Samples	
		<input checked="" type="checkbox"/> denise.wallen@terracon.com Project Assistant		PLM Analysis - Analyze all samples	
				EMLabPK TAT: 3-5 days	
Project #:	NA227079	Project Address:	1100 N Ham Lane, Lodi	Sampling Date:	10/05/2022 - 10/07/2022
Project Name:	LUSD Lakewood Elem School Pre-reno HazMat Survey			Sampled By:	J. Alexander & W. Renner
Building Name / Area:				Page <u>1</u> of <u>5</u>	
Building C					

HM#	Material Description	Sample ID	Sample Location & Material Location	Quantity
C-01	Main rolled roof field			
C-1A	Upper roof center			6,750 sq. ft
C-1B	lower roof East side			
C-1C	Awning NW side			
C-02	Roller roof curb			
C-2A	Upper roof South vent			350 sq. ft
C-2B	lower roof East vent			
C-2C	lower roof NW vent			
C-03	Black Penetration Membrane			
C-3A	Upper roof SE penetration pipe			10 sq. ft
C-3B	lower roof SE penetration pipe			
C-3C	lower roof SW penetration pipe			
C-04	Mortar & Grout associated w/ blue 1" ceramic floor tile			
C-4A	C107 at drain			200 sq. ft
C-4B	C107 at drain			
C				
C-05	Mortar & Grout associated w/ blue 4" ceramic wall tile			
C-5A	C107 by entrance			350 sq. ft
C-5B	C107 by entrance			
C				

Relinquished By:

Wyatt Renner

Signature:

Date/Time:

10/7/22

Received By:

ANDREW ARETEGUI

Signature:

Date/Time:

10/10/22 9:30A

Relinquished By:

Signature:

Date/Time:

Received By:

Signature:

Date/Time:



003052705

1220 Concord Avenue, Suite 450

Concord, CA 94520

P (925) 609-7224

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E-MAIL REPORT TO:		<input checked="" type="checkbox"/> tony.mikacich@terracon.com Project Manager		Asbestos Bulk Samples	
		<input checked="" type="checkbox"/> denise.wallen@terracon.com Project Assistant		PLM Analysis - Analyze all samples	
				EMLabPK TAT: 3-5 days	
Project #:	NA227079	Project Address:	1100 N Ham Lane, Lodi	Sampling Date:	10/05/2022 – 10/07/2022
Project Name:	LUSD Lakewood Elem School Pre-reno HazMat Survey			Sampled By:	J. Alexander & W. Renner
Building Name / Area:		Building C		Page 2 of 5	

HM#	Material Description	Sample ID	Sample Location & Material Location	Quantity
C-06	Mortar & Grout associated w/ Green 1 in floor tile			
		C-6A	C109 at entry way	200 Sq. ft
		C-6B	C109 at entry way	
		C		
C-07	Mortar & Grout associated w/ 4 in Green wall tile			
		C-7A	C109 behind door	350 Sq. ft
		C-7B	C109 behind door	
		C		
C-08	Grey Vinyl sheet w/ burlap & yellow glue			
		C-8A	C101 SW corner	180 Sq. ft
		C-8B	C101 SW corner	
		C-8C	C101 South wall	
C-09	9" VFT w/ black mortar			
		C-9A	C101 North wall	4,200 Sq. ft
		C-9B	C103 SE corner	
		C-9C	C104 NE corner	
C-10	Yellow carpet adhesive			
		C-10A	C101 North wall	4,200 Sq. ft
		C-10B	C104 NE corner	
		C-10C	C102 North wall	

Relinquished By:

Wyatt Renner

Signature:

Date/Time:

10/7/22

Received By:

ANDREW ARETEGUI

Signature:

Date/Time:

10/10/22 9:30 AM

Relinquished By:

Signature:

Date/Time:

Received By:

Signature:

Date/Time:



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Concord, CA 94520

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E-MAIL REPORT TO:		<input checked="" type="checkbox"/> tony.mikacich@terracon.com Project Manager		Asbestos Bulk Samples	
		<input checked="" type="checkbox"/> denise.wallen@terracon.com Project Assistant		PLM Analysis - Analyze all samples	
				EMLabPK TAT: 3-5 days	
Project #:	NA227079	Project Address:	1100 N Ham Lane, Lodi	Sampling Date:	10/05/2022 - 10/07/2022
Project Name:	LUSD Lakewood Elem School Pre-reno HazMat Survey			Sampled By:	J. Alexander & W. Renner
Building Name / Area:		Building C		Page 3 of 5	

HM# C-11	Material Description	Perimeter drywall w/ joint compound	
Sample ID	Sample Location & Material Location		Quantity
C-11A	C101 SW door		2,400 sq ft
C-11B	C104 NE door		
C-11C	C105 SE door		
HM# C-12	Material Description:	4 in core w/ brown glue	
Sample ID	Sample Location & Material Location		Quantity
C-12A	C101 SW door		310 sq. ft
C-12B	C104 NE door		
C-12C	C103 NW door		
HM# C-13	Material Description:	white sink undercoat	
Sample ID	Sample Location & Material Location		Quantity
C-13A	C101 at sink		20 sq. ft
C-13B	C104 sink		
C-13C	C105 sink		
HM# C-14	Material Description:	core drywall	
Sample ID	Sample Location & Material Location		Quantity
C-14A	Jan closet		800 sq. ft
C-14B	Mech room ceiling		
C-14C	Mech room ceiling		
HM# C-15	Material Description:	gray duct Puffy tape	
Sample ID	Sample Location & Material Location		Quantity
C-15A	Mech room		50 sq. ft
C-15B	mech room		
C-15C	South exterior HVAC duct		

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Wyatt Rm

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E-MAIL REPORT TO:		<input checked="" type="checkbox"/> tony.mikacich@terracon.com Project Manager		Asbestos Bulk Samples	
		<input checked="" type="checkbox"/> denise.wallen@terracon.com Project Assistant		PLM Analysis - Analyze all samples	
				EMLabPK TAT: 3-5 days	
Project #:	NA227079	Project Address:	1100 N Ham Lane, Lodi	Sampling Date:	10/05/2022 - 10/07/2022
Project Name:	LUSD Lakewood Elem School Pre-reno HazMat Survey			Sampled By:	J. Alexander & W. Renner
Building Name / Area:		Building C		Page 4 of 5	

HM#	C-16	Material Description	White Jut Sealant	
Sample ID		Sample Location & Material Location		Quantity
C-16A		South exterior HVAC duct		10 sq ft
C-16B		South exterior HVAC duct		
C-16C		Mech room round duct		
HM#	C-17	Material Description:	Black Sink Undercoat	
Sample ID		Sample Location & Material Location		Quantity
C-17A		Teachers lounge Sink		11 sq ft
C-17B		Teachers lounge Sink		
C				
HM#	C-18	Material Description:	1x2 acoustic ceiling tile	
Sample ID		Sample Location & Material Location		Quantity
C-18A		Teachers lounge		2,500 sq ft
C-18B		Hallway outside girls bathroom		
C				
HM#	C-19	Material Description:	Partition drywall w/ Joint compound	
Sample ID		Sample Location & Material Location		Quantity
C-19A		C103 entry to room C101		2,400 sq ft
C-19B		C103.1 entry to room C105		
C-19C		C103.1 N entry door		
HM#	C-20	Material Description:	Black window gasket	
Sample ID		Sample Location & Material Location		Quantity
C-20A		C103 N exterior windows		800 sq ft
C-20B		C104 E exterior windows		
C-20C		C102 W exterior windows		

Relinquished By:

Wyatt Renner

Signature:

Wyatt Renner

Date/Time:

10/7/22

Received By:

ANDREW ARETEGUI

Signature:

Andrew Aretegui

Date/Time:

10/10/22 9:30 A

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Date/Time:



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E-MAIL REPORT TO:		<input checked="" type="checkbox"/> tony.mikacich@terracon.com Project Manager		Asbestos Bulk Samples PLM Analysis - Analyze all samples EMLabPK TAT: 3-5 days	
		<input checked="" type="checkbox"/> denise.wall@terracon.com Project Assistant			
Project #:	NA227079	Project Address:	1100 N Ham Lane, Lodi	Sampling Date:	10/05/2022 – 10/07/2022
Project Name:	LUSD Lakewood Elem School Pre-reno HazMat Survey			Sampled By:	J. Alexander & W. Renner
Building Name / Area:				Page <u>5</u> of <u>5</u>	

HM# C-21	Material Description	White window Calk	
Sample ID	Sample Location & Material Location		Quantity
C-21A	C103 NW exterior window		900 sq ft
C-21B	C104 E exterior window		
C-21C	C102 W exterior window		
HM# C-22	Material Description:	Black building Sealant	
Sample ID	Sample Location & Material Location		Quantity
C-22A	SW exterior corner		150 ln ft
C-22B	SE exterior corner		
C-22C	S exterior		
HM#	Material Description:		
Sample ID	Sample Location & Material Location		Quantity
A			
B			
C			
HM#	Material Description:		
Sample ID	Sample Location & Material Location		Quantity
A			
B			
C			
HM#	Material Description:		
Sample ID	Sample Location & Material Location		Quantity
A			
B			
C			

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Wyatt Renner
ANDREW ARESTEGUI

10/10/22 9:30 A



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E-MAIL REPORT TO:		<input checked="" type="checkbox"/> tony.mikacich@terracon.com Project Manager		Lead in Paint & Bulk Samples	
		<input checked="" type="checkbox"/> denise.wallin@terracon.com Project Assistant		FLAME AA Analysis / TTLC	
				EMLabPK TAT: 3-5 days	
Project #:	NA227079	Project Address:	1100 N Ham Lane, Lodi	Sampling Date:	10/05/2022 – 10/07/2022
Project Name:	LUSD Lakewood Elem School Pre-reno HazMat Survey			Sampled By:	J. Alexander & W. Renner
Building Name / Area:				Page <u>1</u> of <u>1</u>	
Building Name / Area:				<u>Building C</u>	

Sample #	Color:	Paint or Bulk	Size of Ceramic	Substrate	Component	Location	Condition (I/F/P)
Examples:		P or B	ie. 4"x4"	DW / Metal / Concrete / Stucco	Wall / Door / Frame / Sill		
Pb-C-01	Beige	P	—	wall	roof wall	upper lower transition wall east	I
Pb-C-02	blue	Bulk	2"x2"	concrete	floor	clo7 at door	I
Pb-C-03	blue	B	4"x4"	metal/dw	wall	clo7 by entrance	I
Pb-C-04	green	B	1"x1"	concrete	floor	clo9 by entryway	I
Pb-C-05	green	B	4"x4"	metal/dw	wall	clo9 behind door	I
Pb-C-06	gray	B	—	concrete	floor	clo1 south wall	I
Pb-C-07	Brown	P	—	metal	duct	clo5 duct	I
Pb-C-08	white	B	—	metal	window/cork	clo3 W window	I
Pb-C-09	white	P	—	wall paper/dw	wall	clo1 E by door	I
Pb-							
Pb-							
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Wyatt Renner
ANDREW ARETEGUWyatt Renner
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10/7/22

10/10/22 9:30 A

Report for:

Denise Wallen
Terracon Consultants, Inc. - Tustin, CA
23041 Avenida De La Carlota
Suite 350
Laguna Hills, CA 92653

Regarding: Eurofins EPK Built Environment Testing, LLC
Project: NA227079; LUSD Lakewood Elem School Pre-Reno HazMat Survey
EML ID: 3052714

Approved by:



Approved Signatory
Danny Li

Dates of Analysis:
Asbestos PLM: 10-17-2022

Service SOPs: Asbestos PLM (EPA 40CFR App E to Sub E of Part 763 & EPA METHOD 600/R-93-116, SOP EM-AS-S-1267)
NVLAP Lab Code 200757-0

All samples were received in acceptable condition unless noted in the Report Comments portion in the body of the report. The results relate only to the samples as received and tested. The results include an inherent uncertainty of measurement associated with estimating percentages by polarized light microscopy. Measurement uncertainty data for sample results with >1% asbestos concentration can be provided when requested.

Eurofins EPK Built Environment Testing, LLC ("the Company"), a member of the Eurofins Built Environment Testing group of companies, shall have no liability to the client or the client's customer with respect to decisions or recommendations made, actions taken or courses of conduct implemented by either the client or the client's customer as a result of or based upon the Test Results. In no event shall the Company be liable to the client with respect to the Test Results except for the Company's own willful misconduct or gross negligence nor shall the Company be liable for incidental or consequential damages or lost profits or revenues to the fullest extent such liability may be disclaimed by law, even if the Company has been advised of the possibility of such damages, lost profits or lost revenues. In no event shall the Company's liability with respect to the Test Results exceed the amount paid to the Company by the client therefor.

Client: Terracon Consultants, Inc. - Tustin, CA
C/O: Denise Wallen

Re: NA227079; LUSD Lakewood Elem School Pre-
Reno HazMat Survey

Date of Receipt: 10-10-2022
Date of Report: 10-17-2022

ASBESTOS PLM REPORT

Total Samples Submitted: 42

Total Samples Analyzed: 42

Total Samples with Layer Asbestos Content > 1%: 15

Location: D-1A, Perimeter Drywall w/ Joint Compound; D115 NW Corner

Lab ID-Version‡: 14724279-1

Sample Layers	Asbestos Content
White Joint Compound	2% Chrysotile
White Drywall with Brown Paper	ND
Composite Asbestos Fibrous Content:	< 1% Asbestos
Composite Non-Asbestos Content:	10% Cellulose
Sample Composite Homogeneity:	Moderate

Comments: Composite asbestos content provided is only for Drywall/Joint compound. Composite content provided for this analysis has been performed by following the NESHAP guidelines.

Location: D-1B, Perimeter Drywall w/ Joint Compound; D116 Back Door (North Door)

Lab ID-Version‡: 14724280-1

Sample Layers	Asbestos Content
White Joint Compound	2% Chrysotile
White Drywall with Brown Paper	ND
Composite Asbestos Fibrous Content:	< 1% Asbestos
Composite Non-Asbestos Content:	10% Cellulose
Sample Composite Homogeneity:	Moderate

Comments: Composite asbestos content provided is only for Drywall/Joint compound. Composite content provided for this analysis has been performed by following the NESHAP guidelines.

Location: D-1C, Perimeter Drywall w/ Joint Compound; D108 South Door

Lab ID-Version‡: 14724281-1

Sample Layers	Asbestos Content
White Joint Compound	2% Chrysotile
White Drywall with Brown Paper	ND
Composite Asbestos Fibrous Content:	< 1% Asbestos
Composite Non-Asbestos Content:	10% Cellulose
Sample Composite Homogeneity:	Moderate

Comments: Composite asbestos content provided is only for Drywall/Joint compound. Composite content provided for this analysis has been performed by following the NESHAP guidelines.

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Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.

‡ A "Version" indicated by "-x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

Client: Terracon Consultants, Inc. - Tustin, CA

C/O: Denise Wallen

Re: NA227079; LUSD Lakewood Elem School Pre-
Reno HazMat Survey

Date of Receipt: 10-10-2022

Date of Report: 10-17-2022

ASBESTOS PLM REPORT

Location: D-2A, 9 in Off White Vinyl Floor Tile w/ Black Mastic; D115 NW Corner

Lab ID-Version‡: 14724282-1

Sample Layers	Asbestos Content
Off-White Floor Tile	5% Chrysotile
Black Mastic	5% Chrysotile
Sample Composite Homogeneity: Moderate	

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Client: Terracon Consultants, Inc. - Tustin, CA

C/O: Denise Wallen

Re: NA227079; LUSD Lakewood Elem School Pre-
Reno HazMat Survey

Date of Receipt: 10-10-2022

Date of Report: 10-17-2022

ASBESTOS PLM REPORT

Location: D-2B, 9 in Off White Vinyl Floor Tile w/ Black Mastic; D109 NW Corner

Lab ID-Version‡: 14724283-1

Sample Layers	Asbestos Content
Off-White Floor Tile	5% Chrysotile
Black Mastic	5% Chrysotile
Sample Composite Homogeneity:	Moderate

Location: D-2C, 9 in Off White Vinyl Floor Tile w/ Black Mastic; D109 NE Corner

Lab ID-Version‡: 14724284-1

Sample Layers	Asbestos Content
Off-White Floor Tile	5% Chrysotile
Black Mastic	5% Chrysotile
Sample Composite Homogeneity:	Moderate

Location: D-3A, 4 in Vinyl Cove Base w/ Brown and White Glue; D115 NW Corner

Lab ID-Version‡: 14724285-1

Sample Layers	Asbestos Content
Black Baseboard	ND
Brown Mastic	ND
Tan Mastic	ND
Brown Paper	ND
Composite Non-Asbestos Content:	10% Cellulose
Sample Composite Homogeneity:	Poor

Location: D-3B, 4 in Vinyl Cove Base w/ Brown and White Glue; D116 SE Corner

Lab ID-Version‡: 14724286-1

Sample Layers	Asbestos Content
Black Baseboard	ND
Brown Mastic	ND
Tan Mastic	ND
Brown Paper	ND
Composite Non-Asbestos Content:	10% Cellulose
Sample Composite Homogeneity:	Poor

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Client: Terracon Consultants, Inc. - Tustin, CA

C/O: Denise Wallen

Re: NA227079; LUSD Lakewood Elem School Pre-
Reno HazMat Survey

Date of Receipt: 10-10-2022

Date of Report: 10-17-2022

ASBESTOS PLM REPORT

Location: D-3C, 4 in Vinyl Cove Base w/ Brown and White Glue; D108 South Door

Lab ID-Version‡: 14724287-1

Sample Layers	Asbestos Content
Black Baseboard	ND
Brown Mastic	ND
Tan Mastic	ND
Brown Paper	ND
Composite Non-Asbestos Content:	10% Cellulose
Sample Composite Homogeneity:	Poor

Location: D-4A, Yellow Carpet Glue; D115 NW Corner

Lab ID-Version‡: 14724288-1

Sample Layers	Asbestos Content
Yellow Carpet Glue	ND
Sample Composite Homogeneity:	Good

Location: D-4B, Yellow Carpet Glue; D116 SE Corner

Lab ID-Version‡: 14724289-1

Sample Layers	Asbestos Content
Yellow Carpet Glue	ND
Sample Composite Homogeneity:	Good

Location: D-4C, Yellow Carpet Glue; D108 NE Corner

Lab ID-Version‡: 14724290-1

Sample Layers	Asbestos Content
Yellow Carpet Glue	ND
Sample Composite Homogeneity:	Good

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Client: Terracon Consultants, Inc. - Tustin, CA

C/O: Denise Wallen

Re: NA227079; LUSD Lakewood Elem School Pre-
Reno HazMat Survey

Date of Receipt: 10-10-2022

Date of Report: 10-17-2022

ASBESTOS PLM REPORT

Location: D-5A, Black Sink Undercoat; D115 Sink

Lab ID-Version‡: 14724291-1

Sample Layers	Asbestos Content
Black Sink Undercoating	5% Chrysotile
Sample Composite Homogeneity:	Good

Location: D-5B, Black Sink Undercoat; D116 Sink

Lab ID-Version‡: 14724292-1

Sample Layers	Asbestos Content
Black Sink Undercoating	5% Chrysotile
Sample Composite Homogeneity:	Good

Location: D-5C, Black Sink Undercoat; D108 Sink

Lab ID-Version‡: 14724293-1

Sample Layers	Asbestos Content
Black Sink Undercoating	5% Chrysotile
Sample Composite Homogeneity:	Good

Location: D-6A, 1x2 Acoustic Ceiling Tile; D115 NW Ceiling

Lab ID-Version‡: 14724294-1

Sample Layers	Asbestos Content
Orange Ceiling Tile with White Paint	ND
Composite Non-Asbestos Content:	95% Cellulose
Sample Composite Homogeneity:	Good

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Client: Terracon Consultants, Inc. - Tustin, CA

C/O: Denise Wallen

Re: NA227079; LUSD Lakewood Elem School Pre-
Reno HazMat Survey

Date of Receipt: 10-10-2022

Date of Report: 10-17-2022

ASBESTOS PLM REPORT

Location: D-6B, 1x2 Acoustic Ceiling Tile; D116 SW Ceiling

Lab ID-Version‡: 14724295-1

Sample Layers	Asbestos Content
Orange Ceiling Tile with White Paint	ND
Composite Non-Asbestos Content:	95% Cellulose
Sample Composite Homogeneity:	Good

Location: D-6C, 1x2 Acoustic Ceiling Tile; D109 East Side

Lab ID-Version‡: 14724296-1

Sample Layers	Asbestos Content
Orange Ceiling Tile with White Paint	ND
Composite Non-Asbestos Content:	95% Cellulose
Sample Composite Homogeneity:	Good

Location: D-7A, Partition Drywall w/ Joint Compound; D116 SE Corner

Lab ID-Version‡: 14724297-1

Sample Layers	Asbestos Content
White Joint Compound	2% Chrysotile
White Drywall with Brown Paper	ND
Composite Asbestos Fibrous Content:	< 1% Asbestos
Composite Non-Asbestos Content:	10% Cellulose
Sample Composite Homogeneity:	Moderate

Comments: Composite asbestos content provided is only for Drywall/Joint compound. Composite content provided for this analysis has been performed by following the NESHAP guidelines.

Location: D-7B, Partition Drywall w/ Joint Compound; D109 SW Corner Off-West Wall

Lab ID-Version‡: 14724298-1

Sample Layers	Asbestos Content
White Joint Compound	2% Chrysotile
White Drywall with Brown Paper	ND
Composite Asbestos Fibrous Content:	< 1% Asbestos
Composite Non-Asbestos Content:	10% Cellulose
Sample Composite Homogeneity:	Moderate

Comments: Composite asbestos content provided is only for Drywall/Joint compound. Composite content provided for this analysis has been performed by following the NESHAP guidelines.

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Client: Terracon Consultants, Inc. - Tustin, CA

C/O: Denise Wallen

Re: NA227079; LUSD Lakewood Elem School Pre-
Reno HazMat Survey

Date of Receipt: 10-10-2022

Date of Report: 10-17-2022

ASBESTOS PLM REPORT

Location: D-7C, Partition Drywall w/ Joint Compound; D115 West Wall North side

Lab ID-Version‡: 14724299-1

Sample Layers	Asbestos Content
White Joint Compound	2% Chrysotile
White Drywall with Brown Paper	ND
Composite Asbestos Fibrous Content:	< 1% Asbestos
Composite Non-Asbestos Content:	10% Cellulose
Sample Composite Homogeneity:	Moderate

Comments: Composite asbestos content provided is only for Drywall/Joint compound. Composite content provided for this analysis has been performed by following the NESHAP guidelines.

Location: D-8A, Main Rolled Roof Field; Upper Roof Center

Lab ID-Version‡: 14724300-1

Sample Layers	Asbestos Content
Black Roofing Shingle	ND
Composite Non-Asbestos Content:	15% Glass Fibers
Sample Composite Homogeneity:	Good

Location: D-8B, Main Rolled Roof Field; Awning East Side

Lab ID-Version‡: 14724301-1

Sample Layers	Asbestos Content
Black Roofing Shingle	ND
Composite Non-Asbestos Content:	15% Glass Fibers
Sample Composite Homogeneity:	Good

Location: D-8C, Main Rolled Roof Field; West Side Lower Roof

Lab ID-Version‡: 14724302-1

Sample Layers	Asbestos Content
Black Roofing Shingle	ND
Composite Non-Asbestos Content:	15% Glass Fibers
Sample Composite Homogeneity:	Good

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Client: Terracon Consultants, Inc. - Tustin, CA

C/O: Denise Wallen

Re: NA227079; LUSD Lakewood Elem School Pre-
Reno HazMat Survey

Date of Receipt: 10-10-2022

Date of Report: 10-17-2022

ASBESTOS PLM REPORT

Location: D-9A, Rolled Roof Curb; Upper Roof North Vent

Lab ID-Version‡: 14724303-1

Sample Layers	Asbestos Content
Black Roofing Shingle	ND
Composite Non-Asbestos Content:	15% Glass Fibers
Sample Composite Homogeneity:	Good

Location: D-9B, Rolled Roof Curb; Lower Roof East Side Vent

Lab ID-Version‡: 14724304-1

Sample Layers	Asbestos Content
Black Roofing Shingle	ND
Composite Non-Asbestos Content:	15% Glass Fibers
Sample Composite Homogeneity:	Good

Location: D-9C, Rolled Roof Curb; South West Lower Roof

Lab ID-Version‡: 14724305-1

Sample Layers	Asbestos Content
Black Roofing Shingle	ND
Composite Non-Asbestos Content:	15% Glass Fibers
Sample Composite Homogeneity:	Good

Location: D-10A, Black Penetration Mastic; Lower Roof East Penetration Pipe

Lab ID-Version‡: 14724306-1

Sample Layers	Asbestos Content
Black Mastic	ND
Sample Composite Homogeneity:	Good

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Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.

‡ A "Version" indicated by "-x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

Client: Terracon Consultants, Inc. - Tustin, CA

C/O: Denise Wallen

Re: NA227079; LUSD Lakewood Elem School Pre-
Reno HazMat Survey

Date of Receipt: 10-10-2022

Date of Report: 10-17-2022

ASBESTOS PLM REPORT

Location: D-10B, Black Penetration Mastic; Lower Roof East Penetration Pipe

Lab ID-Version‡: 14724307-1

Sample Layers	Asbestos Content
Black Mastic	ND
Sample Composite Homogeneity: Good	

Location: D-10C, Black Penetration Mastic; SW Lower Roof

Lab ID-Version‡: 14724308-1

Sample Layers	Asbestos Content
Black Mastic	ND
Sample Composite Homogeneity: Good	

Location: D-11A, White Roof Coating Patch; NW Patch-North

Lab ID-Version‡: 14724309-1

Sample Layers	Asbestos Content
White Coating	ND
Sample Composite Homogeneity: Good	

Location: D-11B, White Roof Coating Patch; NW Patch-Center

Lab ID-Version‡: 14724310-1

Sample Layers	Asbestos Content
White Coating	ND
Sample Composite Homogeneity: Good	

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Client: Terracon Consultants, Inc. - Tustin, CA

C/O: Denise Wallen

Re: NA227079; LUSD Lakewood Elem School Pre-
Reno HazMat Survey

Date of Receipt: 10-10-2022

Date of Report: 10-17-2022

ASBESTOS PLM REPORT

Location: D-11C, White Roof Coating Patch; NW Patch-South

Lab ID-Version‡: 14724311-1

Sample Layers	Asbestos Content
White Coating	ND
Sample Composite Homogeneity: Good	

Location: D-12A, White Window Caulk; South Window D109

Lab ID-Version‡: 14724312-1

Sample Layers	Asbestos Content
Gray Caulk	ND
Sample Composite Homogeneity: Good	

Location: D-12B, White Window Caulk; South East Window D108

Lab ID-Version‡: 14724313-1

Sample Layers	Asbestos Content
Gray Caulk	ND
Sample Composite Homogeneity: Good	

Location: D-12C, White Window Caulk; South West Window D108

Lab ID-Version‡: 14724314-1

Sample Layers	Asbestos Content
Gray Caulk	ND
Sample Composite Homogeneity: Good	

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Client: Terracon Consultants, Inc. - Tustin, CA

C/O: Denise Wallen

Re: NA227079; LUSD Lakewood Elem School Pre-
Reno HazMat Survey

Date of Receipt: 10-10-2022

Date of Report: 10-17-2022

ASBESTOS PLM REPORT

Location: D-13A, Black Building Sealant; East Exterior

Lab ID-Version‡: 14724315-1

Sample Layers	Asbestos Content
Black Mastic	5% Chrysotile
Sample Composite Homogeneity: Good	

Location: D-13B, Black Building Sealant; SE Exterior Corner

Lab ID-Version‡: 14724316-1

Sample Layers	Asbestos Content
Black Mastic	5% Chrysotile
Sample Composite Homogeneity: Good	

Location: D-13C, Black Building Sealant; South Exterior

Lab ID-Version‡: 14724317-1

Sample Layers	Asbestos Content
Black Mastic	5% Chrysotile
Sample Composite Homogeneity: Good	

Location: D-14A, Black Window Gasket; D109 South Exterior Window

Lab ID-Version‡: 14724318-1

Sample Layers	Asbestos Content
Black Gasket	< 1% Chrysotile
Sample Composite Homogeneity: Good	

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Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.

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Eurofins EPK Built Environment Testing, LLC

2841 Dow Avenue, Suite 300, Tustin, CA 92780

(866) 888-6653 www.eurofinsus.com/Built

Client: Terracon Consultants, Inc. - Tustin, CA

C/O: Denise Wallen

Re: NA227079; LUSD Lakewood Elem School Pre- Date of Receipt: 10-10-2022

Reno HazMat Survey Date of Report: 10-17-2022

ASBESTOS PLM REPORT**Location: D-14B, Black Window Gasket; D109 South Exterior Window**

Lab ID-Version‡: 14724319-1

Sample Layers	Asbestos Content
Black Gasket	< 1% Chrysotile
Sample Composite Homogeneity: Good	

Location: D-14C, Black Window Gasket; D108 South Exterior Window

Lab ID-Version‡: 14724320-1

Sample Layers	Asbestos Content
Black Gasket	< 1% Chrysotile
Sample Composite Homogeneity: Good	

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Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.

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Report for:

Denise Wallen
Terracon Consultants, Inc. - Tustin, CA
23041 Avenida De La Carlota
Suite 350
Laguna Hills, CA 92653

Regarding: Eurofins EPK Built Environment Testing, LLC
Project: NA227079; LUSD Lakewood Elem School Pre-reno HazMat Survey- 1100 N Ham Lane, Lodi
EML ID: 3052683

Approved by:



Approved Signatory
Danny Li

Dates of Analysis:
Asbestos PLM: 10-14-2022

Service SOPs: Asbestos PLM (EPA 40CFR App E to Sub E of Part 763 & EPA METHOD 600/R-93-116, SOP EM-AS-S-1267)
NVLAP Lab Code 200757-0

All samples were received in acceptable condition unless noted in the Report Comments portion in the body of the report. The results relate only to the samples as received and tested. The results include an inherent uncertainty of measurement associated with estimating percentages by polarized light microscopy. Measurement uncertainty data for sample results with >1% asbestos concentration can be provided when requested.

Eurofins EPK Built Environment Testing, LLC ("the Company"), a member of the Eurofins Built Environment Testing group of companies, shall have no liability to the client or the client's customer with respect to decisions or recommendations made, actions taken or courses of conduct implemented by either the client or the client's customer as a result of or based upon the Test Results. In no event shall the Company be liable to the client with respect to the Test Results except for the Company's own willful misconduct or gross negligence nor shall the Company be liable for incidental or consequential damages or lost profits or revenues to the fullest extent such liability may be disclaimed by law, even if the Company has been advised of the possibility of such damages, lost profits or lost revenues. In no event shall the Company's liability with respect to the Test Results exceed the amount paid to the Company by the client therefor.

Eurofins EPK Built Environment Testing, LLC

2841 Dow Avenue, Suite 300, Tustin, CA 92780

(866) 888-6653 www.eurofinsus.com/Built

Client: Terracon Consultants, Inc. - Tustin, CA

C/O: Denise Wallen

Re: NA227079; LUSD Lakewood Elem School Pre-
reno HazMat Survey- 1100 N Ham Lane, Lodi

Date of Sampling: 10-05-2022

Date of Receipt: 10-10-2022

Date of Report: 10-14-2022

ASBESTOS PLM REPORT**Total Samples Submitted:** 2**Total Samples Analyzed:** 2**Total Samples with Layer Asbestos Content > 1%:** 0**Location: Pb-D-01, White, DW, wall, D109 by north door**

Lab ID-Version‡: 14730406-1

Sample Layers	Asbestos Content
White Paint	ND
White Semi-Fibrous Material	ND
Composite Non-Asbestos Content:	20% Synthetic Fibers
Sample Composite Homogeneity:	Good

Location: Pb-D-02, Beige, wood, roof wall, east division wall

Lab ID-Version‡: 14730407-1

Sample Layers	Asbestos Content
Beige Paint	ND
Sample Composite Homogeneity:	Good

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Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.

‡ A "Version" indicated by "-x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

Report for:

Denise Wallen
Terracon Consultants, Inc. - Tustin, CA
23041 Avenida De La Carlota
Suite 350
Laguna Hills, CA 92653

Regarding: Eurofins EPK Built Environment Testing, LLC
Project: NA227079; LUSD Lakewood Elem School Pre-Reno HazMat Survey
EML ID: 3052714

Approved by:



Approved Signatory
Danny Li

Dates of Analysis:

Asbestos-EPA 400 point count: 11-16-2022

Service SOPs: Asbestos-EPA 400 point count (EPA 40CFR App E to Sub E of Part 763 & EPA METHOD 600/R-93-116, SOP EM-AS-S-1262)
NVLAP Lab Code 200757-0

All samples were received in acceptable condition unless noted in the Report Comments portion in the body of the report. Due to the nature of the analyses performed, field blank correction of results is not applied. The results relate only to the samples as received and tested.

Eurofins EPK Built Environment Testing, LLC ("the Company"), a member of the Eurofins Built Environment Testing group of companies, shall have no liability to the client or the client's customer with respect to decisions or recommendations made, actions taken or courses of conduct implemented by either the client or the client's customer as a result of or based upon the Test Results. In no event shall the Company be liable to the client with respect to the Test Results except for the Company's own willful misconduct or gross negligence nor shall the Company be liable for incidental or consequential damages or lost profits or revenues to the fullest extent such liability may be disclaimed by law, even if the Company has been advised of the possibility of such damages, lost profits or lost revenues. In no event shall the Company's liability with respect to the Test Results exceed the amount paid to the Company by the client therefor.

Client: Terracon Consultants, Inc. - Tustin, CA

C/O: Denise Wallen

Re: NA227079; LUSD Lakewood Elem School Pre-
 Reno HazMat Survey

Date of Receipt: 10-10-2022

Date of Report: 11-16-2022

ASBESTOS POINT COUNT REPORT

Location:	D-1A Perimeter Drywall w/ Joint Compound; D115 NW Corner		
Total Points Counted:	400		
Lab ID-Version‡:	14867365-1		
Sample Layers	Asbestos Type	Asbestos Points Counted	Asbestos Concentration (%)
White Joint Compound with Drywall (Composite)	Chrysotile	0	< 0.25
Layer Totals:		0	NA

Comments: Asbestos was detected, but no points counted.

Location:	D-1B Perimeter Drywall w/ Joint Compound; D116 Back Door (North Door)		
Total Points Counted:	400		
Lab ID-Version‡:	14867366-1		
Sample Layers	Asbestos Type	Asbestos Points Counted	Asbestos Concentration (%)
White Joint Compound with Drywall (Composite)	Chrysotile	0	< 0.25
Layer Totals:		0	NA

Comments: Asbestos was detected, but no points counted.

Location:	D-1C Perimeter Drywall w/ Joint Compound; D108 South Door		
Total Points Counted:	400		
Lab ID-Version‡:	14867367-1		
Sample Layers	Asbestos Type	Asbestos Points Counted	Asbestos Concentration (%)
White Joint Compound with Drywall (Composite)	Chrysotile	1	0.25
Layer Totals:		1	0.25

The analytical sensitivity is 1 asbestos point. The limit of detection is 1 asbestos point divided by the total number of points counted and multiplied by 100.

The results relate only to the items tested. Interpretation is left to the company and/or persons who conducted the field work. The test report shall not be reproduced except in full, without written approval of the laboratory. The report must not be used by the client to claim product certification, approval, or endorsement by any agency of the federal government.

All samples were received in acceptable condition unless otherwise noted. The Company reserves the right to dispose of all samples after a period of thirty (30) days, according to all state and federal guidelines, unless otherwise specified.

Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.

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Client: Terracon Consultants, Inc. - Tustin, CA

C/O: Denise Wallen

Re: NA227079; LUSD Lakewood Elem School Pre-
 Reno HazMat Survey

Date of Receipt: 10-10-2022

Date of Report: 11-16-2022

ASBESTOS POINT COUNT REPORT

Location:	D-7A Partition Drywall w/ Joint Compound; D116 SE Corner		
Total Points Counted:	400		
Lab ID-Version‡:	14867368-1		
Sample Layers	Asbestos Type	Asbestos Points Counted	Asbestos Concentration (%)
White Joint Compound with Drywall (Composite)	Chrysotile	0	< 0.25
Layer Totals:		0	NA

Comments: Asbestos was detected, but no points counted.

Location:	D-7B Partition Drywall w/ Joint Compound; D109 SW Corner Off-West Wall		
Total Points Counted:	400		
Lab ID-Version‡:	14867369-1		
Sample Layers	Asbestos Type	Asbestos Points Counted	Asbestos Concentration (%)
White Joint Compound with Drywall (Composite)	Chrysotile	1	0.25
Layer Totals:		1	0.25

Location:	D-7C Partition Drywall w/ Joint Compound; D115 West Wall North side		
Total Points Counted:	400		
Lab ID-Version‡:	14867370-1		
Sample Layers	Asbestos Type	Asbestos Points Counted	Asbestos Concentration (%)
White Joint Compound with Drywall (Composite)	Chrysotile	0	< 0.25
Layer Totals:		0	NA

Comments: Asbestos was detected, but no points counted.

The analytical sensitivity is 1 asbestos point. The limit of detection is 1 asbestos point divided by the total number of points counted and multiplied by 100.

The results relate only to the items tested. Interpretation is left to the company and/or persons who conducted the field work. The test report shall not be reproduced except in full, without written approval of the laboratory. The report must not be used by the client to claim product certification, approval, or endorsement by any agency of the federal government.

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003052714

1220 Concord Avenue, Suite 450

Concord, CA 94520

P (925) 609-7224

Terracon.com

E-MAIL REPORT TO:		<input checked="" type="checkbox"/> tony.mikacich@terracon.com Project Manager		Asbestos Bulk Samples PLM Analysis - Analyze all samples EMLabPK TAT: 3-5 days		
		<input checked="" type="checkbox"/> denise.wallen@terracon.com Project Assistant				
Project #:	NA227079	Project Address:	1100 N Ham Lane, Lodi		Sampling Date:	10/05/2022 - 10/07/2022
Project Name:	LUSD Lakewood Elem School Pre-reno HazMat Survey			Sampled By:	J. Alexander & W. Renner	
Building Name / Area:			Building D		Page 1 of 3	

HM# D-01	Material Description	Perimeter drywall w/ joint compound	Quantity
Sample ID	Sample Location & Material Location		
D-1A	D115 NW corner		2,800 sq. ft
D-1B	D116 Back door (North door)		
D-1C	D109 South door		
HM# D-02	Material Description:	9 in off white vinyl floor tile w/ black mastic	Quantity
Sample ID	Sample Location & Material Location		
D-2A	D115 NW corner		4,200 sq. ft
D-2B	D109 NW corner		
D-2C	D109 NE corner		
HM# D-03	Material Description:	4 in vinyl core w/ brown & white glue	Quantity
Sample ID	Sample Location & Material Location		
D-3A	D115 NW corner		310 sq. ft
D-3B	D116 SE corner		
D-3C	D109 South door		
HM# D-04	Material Description:	Yellow carpet glue	Quantity
Sample ID	Sample Location & Material Location		
D-4A	D115 NW corner		4,200 sq. ft
D-4B	D116 SE corner		
D-4C	D109 NE corner		
HM# D-05	Material Description:	Black sink undercoat	Quantity
Sample ID	Sample Location & Material Location		
D-5A	D115 Sink		4 sq. ft
D-5B	D116 Sink		
D-5C	D109 Sink		

Relinquished By:

Wyatt Renner

Signature:

Wyatt Renner

Date/Time:

10/7/22

Received By:

Arthur Venegas

Signature:

Arthur Venegas

Date/Time:

10/10/22 9:30

Relinquished By:

Signature:

Date/Time:

Received By:

Signature:

Date/Time:

E-MAIL REPORT TO:		<input checked="" type="checkbox"/> tony.mikacich@terracon.com Project Manager <input checked="" type="checkbox"/> denise.wallen@terracon.com Project Assistant		Asbestos Bulk Samples PLM Analysis - Analyze all samples EMLabPK TAT: 3-5 days	
Project #:	NA227079	Project Address:	1100 N Ham Lane, Lodi		
Project Name:	LUSD Lakewood Elem School Pre-reno HazMat Survey			Sampling Date:	10/05/2022 – 10/07/2022
				Sampled By:	J. Alexander & W. Renner
Building Name / Area:		Building D		Page 2 of 3	

HM#	Material Description	Sample ID	Sample Location & Material Location	Quantity
D-06	1x8 acoustic ceiling tile			
D-6A	D115 NW ceiling			2,500 sq. ft
D-6B	D116 SW ceiling			
D-6C	D109 East side			
D-07	Partition drywall w/ joint compound			
D-7A	D116 SE corner			2,400 sq. ft
D-7B	D109 SW corner off west wall			
D-7C	D115 West wall North side			
D-08	Main rolled Roof Field			
D-8A	Awning Upper roof center			6,750 sq. ft
D-8B	Awning East side			
D-8C	West side lower roof			
D-09	Roller roof web			
D-9A	Awning Upper roof North Vent			250 sq. ft
D-9B	Lower roof East side vent			
D-9C	South West lower roof			
D-10	Black Penetration Mast			
D-10A	Lower roof East penetration pipe			10 sq. ft
D-10B	Lower roof East penetration pipe			
D-10C	SW lower roof			

Relinquished By:	<u>Wyatt Renner</u>	Signature:	<u>[Signature]</u>	Date/Time:	<u>10/7/22</u>
Received By:	<u>Arthur Vengas</u>	Signature:	<u>[Signature]</u>	Date/Time:	<u>10/10/22 9:30am</u>
Relinquished By:		Signature:		Date/Time:	
Received By:		Signature:		Date/Time:	



003052714

1220 Concord Avenue, Suite 450

Concord, CA 94520

P (925) 609-7224

Terracon.com

E-MAIL REPORT TO:		<input checked="" type="checkbox"/> tony.mikacich@terracon.com Project Manager		Asbestos Bulk Samples	
		<input checked="" type="checkbox"/> denise.wallen@terracon.com Project Assistant		PLM Analysis - Analyze all samples	
				EMLabPK TAT: 3-5 days	
Project #:	NA227079	Project Address:	1100 N Ham Lane, Lodi	Sampling Date:	10/05/2022 – 10/07/2022
Project Name:	LUSD Lakewood Elem School Pre-reno HazMat Survey			Sampled By:	J. Alexander & W. Renner
Building Name / Area:			Building D	Page 3 of 3	

HM#	D-11	Material Description	White roof coating patch	
Sample ID		Sample Location & Material Location		Quantity
	D-11 A	NW Patch - North		600 Sq. Ft
	D-11 B	NW Patch - Center		
	D-11 C	NW Patch - South		
HM#	D-12	Material Description:	White window caulk	
Sample ID		Sample Location & Material Location		Quantity
	D-12 A	South window Diag		900 Sq. Ft
	D-12 B	South East window Diag		
	D-12 C	South West window Diag		
HM#	D-13	Material Description:	Black building Sealant	
Sample ID		Sample Location & Material Location		Quantity
	D-13 A	East exterior		150 Ln. Ft
	D-13 B	SE exterior corner		
	D-13 C	South exterior		
HM#	D-14	Material Description:	Black window gasket	
Sample ID		Sample Location & Material Location		Quantity
	D-14 A	Diag South exterior window		900 Sq. Ft
	D-14 B	Diag South exterior window		
	D-14 C	Diag South exterior window		
HM#		Material Description:		
Sample ID		Sample Location & Material Location		Quantity
	A			
	B			
	C			

Relinquished By:

Wyatt Rurr

Signature:

Date/Time:

10/7/22

Received By:

Arthur Venegas

Signature:

Date/Time:

10/10/22 9:30 am

Relinquished By:

Signature:

Date/Time:

Received By:

Signature:

Date/Time:



003052683

1220 Concord Avenue, Suite 450

Concord, CA 94520

P (925) 609-7224

Terracon.com

E-MAIL REPORT TO:		<input checked="" type="checkbox"/> tony.mikacich@terracon.com Project Manager		Lead in Paint & Bulk Samples FLAME AA Analysis / TTLC EMLabPK TAT: 3-5 days	
		<input checked="" type="checkbox"/> denise.wallin@terracon.com Project Assistant			
Project #:	NA227079	Project Address:	1100 N Ham Lane, Lodi	Sampling Date:	10/05/2022 – 10/07/2022
Project Name:	LUSD Lakewood Elem School Pre-reno HazMat Survey			Sampled By:	J. Alexander & W. Renner
Building Name / Area:			Building D	Page 1 of 1	

Sample #	Color:	Paint or Bulk	Size of Ceramic	Substrate	Component	Location	Condition (I/F/P)
Examples:		P or B	ie. 4"x4"	DW / Metal / Concrete / Stucco	Wall / Door / Frame / Sill		
Pb-D-01	white	D	—	DW	Wall	Dlog by north door	I
Pb-D-02	Beige	P	—	wall	roof wall	East dinner wall	I
Pb-D-03	white	B	—	metal	window	Dlog south exterior wall	I
Pb-							
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Relinquished By:	Wyatt Renner	Signature:		Date/Time:	10/7/22
Received By:	ANDREW ARSTFELT	Signature:		Date/Time:	10/10/22 9:30A
Relinquished By:		Signature:		Date/Time:	
Received By:		Signature:		Date/Time:	

Report for:

Denise Wallen
Terracon Consultants, Inc. - Tustin, CA
23041 Avenida De La Carlota
Suite 350
Laguna Hills, CA 92653

Regarding: Eurofins EPK Built Environment Testing, LLC
Project: NA227079; LUSD Lakewood Elem School Pre-Reno HazMat Survey
EML ID: 3052751

Approved by:



Approved Signatory
Danny Li

Dates of Analysis:
Asbestos PLM: 10-17-2022

Service SOPs: Asbestos PLM (EPA 40CFR App E to Sub E of Part 763 & EPA METHOD 600/R-93-116, SOP EM-AS-S-1267)
NVLAP Lab Code 200757-0

All samples were received in acceptable condition unless noted in the Report Comments portion in the body of the report. The results relate only to the samples as received and tested. The results include an inherent uncertainty of measurement associated with estimating percentages by polarized light microscopy. Measurement uncertainty data for sample results with >1% asbestos concentration can be provided when requested.

Eurofins EPK Built Environment Testing, LLC ("the Company"), a member of the Eurofins Built Environment Testing group of companies, shall have no liability to the client or the client's customer with respect to decisions or recommendations made, actions taken or courses of conduct implemented by either the client or the client's customer as a result of or based upon the Test Results. In no event shall the Company be liable to the client with respect to the Test Results except for the Company's own willful misconduct or gross negligence nor shall the Company be liable for incidental or consequential damages or lost profits or revenues to the fullest extent such liability may be disclaimed by law, even if the Company has been advised of the possibility of such damages, lost profits or lost revenues. In no event shall the Company's liability with respect to the Test Results exceed the amount paid to the Company by the client therefor.

Client: Terracon Consultants, Inc. - Tustin, CA

C/O: Denise Wallen

Re: NA227079; LUSD Lakewood Elem School Pre-
Reno HazMat Survey

Date of Receipt: 10-10-2022

Date of Report: 10-17-2022

ASBESTOS PLM REPORT

Total Samples Submitted: 49

Total Samples Analyzed: 49

Total Samples with Layer Asbestos Content > 1%: 13

Location: E-1A, Main Rolled Roof Field; South Awning

Lab ID-Version‡: 14724222-1

Sample Layers	Asbestos Content
Black Roofing Shingle with Pebbles	ND
Black Roofing Felt 1	ND
Black Roofing Felt 2	ND
Brown Paper	ND
Composite Non-Asbestos Content:	35% Glass Fibers 20% Cellulose
Sample Composite Homogeneity:	Moderate

Location: E-1B, Main Rolled Roof Field; East Main Roof

Lab ID-Version‡: 14724232-1

Sample Layers	Asbestos Content
Black Roofing Shingle with Pebbles	ND
Black Roofing Felt 1	ND
Black Roofing Felt 2	ND
Brown Fibrous Material	ND
Composite Non-Asbestos Content:	35% Glass Fibers 20% Cellulose
Sample Composite Homogeneity:	Moderate

Location: E-1C, Main Rolled Roof Field; West Main Roof

Lab ID-Version‡: 14724233-1

Sample Layers	Asbestos Content
Black Roofing Shingle with Pebbles	ND
Black Roofing Felt 1	ND
Black Roofing Felt 2	ND
Brown Fibrous Material	ND
Composite Non-Asbestos Content:	35% Glass Fibers 20% Cellulose
Sample Composite Homogeneity:	Moderate

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Client: Terracon Consultants, Inc. - Tustin, CA

C/O: Denise Wallen

Re: NA227079; LUSD Lakewood Elem School Pre-
Reno HazMat Survey

Date of Receipt: 10-10-2022

Date of Report: 10-17-2022

ASBESTOS PLM REPORT

Location: E-2A, Black Penetration Mastic; NW Pipe Penetration

Lab ID-Version‡: 14724223-1

Sample Layers	Asbestos Content
Black Mastic	ND
Sample Composite Homogeneity:	Good

Location: E-2B, Black Penetration Mastic; SW Pipe Penetration

Lab ID-Version‡: 14724234-1

Sample Layers	Asbestos Content
Black Mastic	ND
Sample Composite Homogeneity:	Good

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Client: Terracon Consultants, Inc. - Tustin, CA

C/O: Denise Wallen

Re: NA227079; LUSD Lakewood Elem School Pre-
Reno HazMat Survey

Date of Receipt: 10-10-2022

Date of Report: 10-17-2022

ASBESTOS PLM REPORT

Location: E-3A, Black Window Gasket; SE Exterior Window

Lab ID-Version‡: 14724224-1

Sample Layers	Asbestos Content
Black Gasket	ND
Sample Composite Homogeneity: Good	

Location: E-3B, Black Window Gasket; SW Center Exterior Window

Lab ID-Version‡: 14724235-1

Sample Layers	Asbestos Content
Black Gasket	ND
Sample Composite Homogeneity: Good	

Location: E-3C, Black Window Gasket; NW Exterior Windows

Lab ID-Version‡: 14724236-1

Sample Layers	Asbestos Content
Black Gasket	ND
Sample Composite Homogeneity: Good	

Location: E-4A, White Window Caulk; South Exterior Window East

Lab ID-Version‡: 14724225-1

Sample Layers	Asbestos Content
White Caulk	ND
Sample Composite Homogeneity: Good	

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Client: Terracon Consultants, Inc. - Tustin, CA

C/O: Denise Wallen

Re: NA227079; LUSD Lakewood Elem School Pre-
Reno HazMat Survey

Date of Receipt: 10-10-2022

Date of Report: 10-17-2022

ASBESTOS PLM REPORT

Location: E-4B, White Window Caulk; South Exterior Window Center

Lab ID-Version‡: 14724237-1

Sample Layers	Asbestos Content
White Caulk	ND
Sample Composite Homogeneity: Good	

Location: E-4C, White Window Caulk; SW Exterior Near Drinking Fountain

Lab ID-Version‡: 14724238-1

Sample Layers	Asbestos Content
White Caulk	ND
Sample Composite Homogeneity: Good	

Location: E-5A, Black Building Sealant; SW Exterior

Lab ID-Version‡: 14724226-1

Sample Layers	Asbestos Content
Black Sealant	5% Chrysotile
Sample Composite Homogeneity: Good	

Location: E-5B, Black Building Sealant; SW Exterior

Lab ID-Version‡: 14724239-1

Sample Layers	Asbestos Content
Black Sealant	5% Chrysotile
Sample Composite Homogeneity: Good	

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Client: Terracon Consultants, Inc. - Tustin, CA

C/O: Denise Wallen

Re: NA227079; LUSD Lakewood Elem School Pre-
Reno HazMat Survey

Date of Receipt: 10-10-2022

Date of Report: 10-17-2022

ASBESTOS PLM REPORT

Location: E-5C, Black Building Sealant; SE Exterior

Lab ID-Version‡: 14724240-1

Sample Layers	Asbestos Content
Black Sealant	5% Chrysotile
Sample Composite Homogeneity: Good	

Location: E-6A, VFT w/ Black Mastic; E101 NW

Lab ID-Version‡: 14724227-1

Sample Layers	Asbestos Content
Tan Mastic	ND
Tan Floor Tile	3% Chrysotile
Black Mastic	5% Chrysotile
Sample Composite Homogeneity: Good	

Location: E-6B, VFT w/ Black Mastic; E101 Center

Lab ID-Version‡: 14724241-1

Sample Layers	Asbestos Content
Tan Mastic	ND
Tan Floor Tile	3% Chrysotile
Black Mastic	5% Chrysotile
Sample Composite Homogeneity: Good	

Location: E-6C, VFT w/ Black Mastic; E101 SE

Lab ID-Version‡: 14724242-1

Sample Layers	Asbestos Content
Tan Mastic	ND
Tan Floor Tile	3% Chrysotile
Black Mastic	5% Chrysotile
Sample Composite Homogeneity: Good	

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Client: Terracon Consultants, Inc. - Tustin, CA

C/O: Denise Wallen

Re: NA227079; LUSD Lakewood Elem School Pre-
Reno HazMat Survey

Date of Receipt: 10-10-2022

Date of Report: 10-17-2022

ASBESTOS PLM REPORT

Location: E-7A, Yellow Carpet Adhesive; E101 NW

Lab ID-Version‡: 14724228-1

Sample Layers	Asbestos Content
Yellow Carpet Adhesive	ND
Sample Composite Homogeneity:	Good

Location: E-7B, Yellow Carpet Adhesive; E101 Center

Lab ID-Version‡: 14724243-1

Sample Layers	Asbestos Content
Yellow Carpet Adhesive	ND
Sample Composite Homogeneity:	Good

Location: E-7C, Yellow Carpet Adhesive; E101 SE

Lab ID-Version‡: 14724244-1

Sample Layers	Asbestos Content
Yellow Carpet Adhesive	ND
Sample Composite Homogeneity:	Good

Location: E-8A, Gray Vinyl Sheet Flooring w/ Burlap and Adhesive; South Restroom

Lab ID-Version‡: 14724229-1

Sample Layers	Asbestos Content
Gray Sheet Flooring with Fibrous Backing	ND
Tan Mastic	ND
Black Mastic	ND
Composite Non-Asbestos Content:	10% Cellulose
Sample Composite Homogeneity:	Good

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Client: Terracon Consultants, Inc. - Tustin, CA

C/O: Denise Wallen

Re: NA227079; LUSD Lakewood Elem School Pre-
Reno HazMat Survey

Date of Receipt: 10-10-2022

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ASBESTOS PLM REPORT

Location: E-8B, Gray Vinyl Sheet Flooring w/ Burlap and Adhesive; South Restroom

Lab ID-Version‡: 14724245-1

Sample Layers	Asbestos Content
Gray Sheet Flooring with Fibrous Backing	ND
Tan Mastic	ND
Composite Non-Asbestos Content:	10% Cellulose
Sample Composite Homogeneity:	Good

Location: E-8C, Gray Vinyl Sheet Flooring w/ Burlap and Adhesive; South Restroom

Lab ID-Version‡: 14724246-1

Sample Layers	Asbestos Content
Gray Sheet Flooring with Fibrous Backing	ND
Tan Mastic	ND
Composite Non-Asbestos Content:	10% Cellulose
Sample Composite Homogeneity:	Good

Location: E-9A, Yellow Wainscot Adhesive; West Wall Restroom

Lab ID-Version‡: 14724230-1

Sample Layers	Asbestos Content
White Semi-Fibrous Material	ND
Yellow Adhesive	ND
Composite Non-Asbestos Content:	20% Cellulose
Sample Composite Homogeneity:	Good

Location: E-9B, Yellow Wainscot Adhesive; West Wall Restroom

Lab ID-Version‡: 14724247-1

Sample Layers	Asbestos Content
White Semi-Fibrous Material	ND
Yellow Adhesive	ND
Composite Non-Asbestos Content:	20% Cellulose
Sample Composite Homogeneity:	Good

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Client: Terracon Consultants, Inc. - Tustin, CA

C/O: Denise Wallen

Re: NA227079; LUSD Lakewood Elem School Pre-
Reno HazMat Survey

Date of Receipt: 10-10-2022

Date of Report: 10-17-2022

ASBESTOS PLM REPORT

Location: E-10A, Concrete Pad; South Side Patio East

Lab ID-Version‡: 14724231-1

Sample Layers	Asbestos Content
Gray Concrete	ND
Sample Composite Homogeneity:	Good

Location: E-10B, Concrete Pad; South Side Patio East

Lab ID-Version‡: 14724248-1

Sample Layers	Asbestos Content
Gray Concrete	ND
Sample Composite Homogeneity:	Good

Location: E-10C, Concrete Pad; South Side Patio West

Lab ID-Version‡: 14724249-1

Sample Layers	Asbestos Content
Gray Concrete	ND
Sample Composite Homogeneity:	Good

Location: E-11A, Asphalt; South Side Playground West

Lab ID-Version‡: 14724250-1

Sample Layers	Asbestos Content
Black Asphalt	ND
Sample Composite Homogeneity:	Good

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Client: Terracon Consultants, Inc. - Tustin, CA

C/O: Denise Wallen

Re: NA227079; LUSD Lakewood Elem School Pre-
Reno HazMat Survey

Date of Receipt: 10-10-2022

Date of Report: 10-17-2022

ASBESTOS PLM REPORT

Location: E-11B, Asphalt; South Side Playground Center

Lab ID-Version‡: 14724251-1

Sample Layers	Asbestos Content
Black Asphalt	ND
Sample Composite Homogeneity:	Good

Location: E-11C, Asphalt; South Side Playground East

Lab ID-Version‡: 14724252-1

Sample Layers	Asbestos Content
Black Asphalt	ND
Sample Composite Homogeneity:	Good

Location: E-12A, Black Sink Undercoating; Adult Sink

Lab ID-Version‡: 14724253-1

Sample Layers	Asbestos Content
Black Sink Undercoating	2% Chrysotile
Sample Composite Homogeneity:	Good

Location: E-12B, Black Sink Undercoating; Adult Sink

Lab ID-Version‡: 14724254-1

Sample Layers	Asbestos Content
Black Sink Undercoating	2% Chrysotile
Sample Composite Homogeneity:	Good

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Reno HazMat Survey

Date of Receipt: 10-10-2022

Date of Report: 10-17-2022

ASBESTOS PLM REPORT

Location: E-13A, Beige Sink Undercoating; Kids Sink

Lab ID-Version‡: 14724255-1

Sample Layers	Asbestos Content
Beige Sink Undercoating	< 1% Chrysotile
Sample Composite Homogeneity:	Moderate

Location: E-13B, Beige Sink Undercoating; Kids Sink

Lab ID-Version‡: 14724256-1

Sample Layers	Asbestos Content
Beige Sink Undercoating	< 1% Chrysotile
Sample Composite Homogeneity:	Moderate

Location: E-14A, 4 In Cove w/ Brown and White Glue; E101 SE Corner

Lab ID-Version‡: 14724257-1

Sample Layers	Asbestos Content
Gray Baseboard	ND
White Glue	ND
Brown Glue	ND
Sample Composite Homogeneity:	Good

Location: E-14B, 4 In Cove w/ Brown and White Glue; E101 North Door

Lab ID-Version‡: 14724258-1

Sample Layers	Asbestos Content
Gray Baseboard	ND
White Glue	ND
Brown Glue	ND
Sample Composite Homogeneity:	Good

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Re: NA227079; LUSD Lakewood Elem School Pre-
Reno HazMat Survey

Date of Receipt: 10-10-2022

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ASBESTOS PLM REPORT

Location: E-14C, 4 In Cove w/ Brown and White Glue; E101 SE Near Bathroom Door

Lab ID-Version‡: 14724259-1

Sample Layers	Asbestos Content
Gray Baseboard	ND
White Glue	ND
Brown Glue	ND
Sample Composite Homogeneity: Good	

Location: E-15A, Perimeter Drywall w/ Joint Compound; E101 South Wall East Corner

Lab ID-Version‡: 14724260-1

Sample Layers	Asbestos Content
Off-White Joint Compound	2% Chrysotile
Cream Tape	ND
White Drywall with Brown Paper	ND
Composite Asbestos Fibrous Content:	< 1% Asbestos
Composite Non-Asbestos Content:	10% Cellulose
Sample Composite Homogeneity:	Poor

Comments: Composite asbestos content provided is only for Drywall/Joint compound. Composite content provided for this analysis has been performed by following the NESHAP guidelines.

Location: E-15B, Perimeter Drywall w/ Joint Compound; E101 East Wall South Corner

Lab ID-Version‡: 14724261-1

Sample Layers	Asbestos Content
Off-White Joint Compound	2% Chrysotile
Cream Tape	ND
White Drywall with Brown Paper	ND
Composite Asbestos Fibrous Content:	< 1% Asbestos
Composite Non-Asbestos Content:	10% Cellulose
Sample Composite Homogeneity:	Poor

Comments: Composite asbestos content provided is only for Drywall/Joint compound. Composite content provided for this analysis has been performed by following the NESHAP guidelines.

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Client: Terracon Consultants, Inc. - Tustin, CA
C/O: Denise Wallen

Re: NA227079; LUSD Lakewood Elem School Pre-
Reno HazMat Survey

Date of Receipt: 10-10-2022
Date of Report: 10-17-2022

ASBESTOS PLM REPORT

Location: E-15C, Perimeter Drywall w/ Joint Compound; E101 North West Door

Lab ID-Version‡: 14724262-1

Sample Layers	Asbestos Content
Off-White Joint Compound	2% Chrysotile
Cream Tape	ND
White Drywall with Brown Paper	ND
Composite Asbestos Fibrous Content:	< 1% Asbestos
Composite Non-Asbestos Content:	10% Cellulose
Sample Composite Homogeneity:	Poor

Comments: Composite asbestos content provided is only for Drywall/Joint compound. Composite content provided for this analysis has been performed by following the NESHAP guidelines.

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Client: Terracon Consultants, Inc. - Tustin, CA
 C/O: Denise Wallen

Re: NA227079; LUSD Lakewood Elem School Pre-
 Reno HazMat Survey

Date of Receipt: 10-10-2022
 Date of Report: 10-17-2022

ASBESTOS PLM REPORT

Location: E-16A, Partition Drywall; E103 South Wall

Lab ID-Version‡: 14724263-1

Sample Layers	Asbestos Content
White Joint Compound with Paint	2% Chrysotile
Cream Tape	ND
White Joint Compound	2% Chrysotile
White Drywall	ND
Composite Asbestos Fibrous Content:	< 1% Asbestos
Composite Non-Asbestos Content:	15% Cellulose
Sample Composite Homogeneity:	Moderate

Comments: Composite asbestos content provided is only for Drywall/Joint compound. Composite content provided for this analysis has been performed by following the NESHAP guidelines.

Location: E-16B, Partition Drywall; E103 East Wall

Lab ID-Version‡: 14724264-1

Sample Layers	Asbestos Content
White Joint Compound with Paint	2% Chrysotile
Cream Tape	ND
White Joint Compound	2% Chrysotile
White Drywall	ND
Composite Asbestos Fibrous Content:	< 1% Asbestos
Composite Non-Asbestos Content:	15% Cellulose
Sample Composite Homogeneity:	Moderate

Comments: Composite asbestos content provided is only for Drywall/Joint compound. Composite content provided for this analysis has been performed by following the NESHAP guidelines.

Location: E-17A, 1x2 ACT (Nailed In); Adult Sink Ceiling

Lab ID-Version‡: 14724265-1

Sample Layers	Asbestos Content
White Ceiling Tile	ND
Composite Non-Asbestos Content:	90% Cellulose
Sample Composite Homogeneity:	Good

Location: E-17B, 1x2 ACT (Nailed In); Kids Sink Ceiling

Lab ID-Version‡: 14724266-1

Sample Layers	Asbestos Content
White Ceiling Tile	ND
Composite Non-Asbestos Content:	90% Cellulose
Sample Composite Homogeneity:	Good

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Client: Terracon Consultants, Inc. - Tustin, CA

C/O: Denise Wallen

Re: NA227079; LUSD Lakewood Elem School Pre-
Reno HazMat Survey

Date of Receipt: 10-10-2022

Date of Report: 10-17-2022

ASBESTOS PLM REPORT

Location: E-17C, 1x2 ACT (Nailed In); South Exit Door

Lab ID-Version‡: 14724267-1

Sample Layers	Asbestos Content
White Ceiling Tile	ND
Composite Non-Asbestos Content:	90% Cellulose
Sample Composite Homogeneity:	Good

Location: E-18A, Concrete Slab; South West Slab

Lab ID-Version‡: 14724268-1

Sample Layers	Asbestos Content
Gray Concrete	ND
Sample Composite Homogeneity:	Good

Location: E-18B, Concrete Slab; South West Slab

Lab ID-Version‡: 14724269-1

Sample Layers	Asbestos Content
Gray Concrete	ND
Sample Composite Homogeneity:	Good

Location: E-18C, Concrete Slab; South West Slab

Lab ID-Version‡: 14724270-1

Sample Layers	Asbestos Content
Gray Concrete	ND
Sample Composite Homogeneity:	Good

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‡ A "Version" indicated by "-x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

Report for:

Denise Wallen
Terracon Consultants, Inc. - Tustin, CA
23041 Avenida De La Carlota
Suite 350
Laguna Hills, CA 92653

Regarding: Eurofins EPK Built Environment Testing, LLC
Project: NA227079; LUSD Lakewood Elem School Pre-reno HazMat Survey
EML ID: 3052675

Approved by:



Approved Signatory
Danny Li

Dates of Analysis:
Asbestos PLM: 10-14-2022

Service SOPs: Asbestos PLM (EPA 40CFR App E to Sub E of Part 763 & EPA METHOD 600/R-93-116, SOP EM-AS-S-1267)
NVLAP Lab Code 200757-0

All samples were received in acceptable condition unless noted in the Report Comments portion in the body of the report. The results relate only to the samples as received and tested. The results include an inherent uncertainty of measurement associated with estimating percentages by polarized light microscopy. Measurement uncertainty data for sample results with >1% asbestos concentration can be provided when requested.

Eurofins EPK Built Environment Testing, LLC ("the Company"), a member of the Eurofins Built Environment Testing group of companies, shall have no liability to the client or the client's customer with respect to decisions or recommendations made, actions taken or courses of conduct implemented by either the client or the client's customer as a result of or based upon the Test Results. In no event shall the Company be liable to the client with respect to the Test Results except for the Company's own willful misconduct or gross negligence nor shall the Company be liable for incidental or consequential damages or lost profits or revenues to the fullest extent such liability may be disclaimed by law, even if the Company has been advised of the possibility of such damages, lost profits or lost revenues. In no event shall the Company's liability with respect to the Test Results exceed the amount paid to the Company by the client therefor.

Eurofins EPK Built Environment Testing, LLC

2841 Dow Avenue, Suite 300, Tustin, CA 92780

(866) 888-6653 www.eurofinsus.com/Built

Client: Terracon Consultants, Inc. - Tustin, CA

C/O: Denise Wallen

Re: NA227079; LUSD Lakewood Elem School Pre-
reno HazMat Survey

Date of Sampling: 10-05-2022

Date of Receipt: 10-10-2022

Date of Report: 10-14-2022

ASBESTOS PLM REPORT**Total Samples Submitted:** 1**Total Samples Analyzed:** 1**Total Samples with Layer Asbestos Content > 1%:** 0**Location: Pb-E-02, White, Wallpaper/DW, Wall, E101 South Wall**

Lab ID-Version‡: 14730409-1

Sample Layers	Asbestos Content
White Wallpaper	ND
Composite Non-Asbestos Content:	25% Synthetic Fibers
Sample Composite Homogeneity:	Good

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Report for:

Denise Wallen
Terracon Consultants, Inc. - Tustin, CA
23041 Avenida De La Carlota
Suite 350
Laguna Hills, CA 92653

Regarding: Eurofins EPK Built Environment Testing, LLC
Project: NA227079; LUSD Lakewood Elem School Pre-Reno HazMat Survey
EML ID: 3052751

Approved by:



Approved Signatory
Danny Li

Dates of Analysis:

Asbestos-EPA 400 point count: 11-16-2022

Service SOPs: Asbestos-EPA 400 point count (EPA 40CFR App E to Sub E of Part 763 & EPA METHOD 600/R-93-116, SOP EM-AS-S-1262)
NVLAP Lab Code 200757-0

All samples were received in acceptable condition unless noted in the Report Comments portion in the body of the report. Due to the nature of the analyses performed, field blank correction of results is not applied. The results relate only to the samples as received and tested.

Eurofins EPK Built Environment Testing, LLC ("the Company"), a member of the Eurofins Built Environment Testing group of companies, shall have no liability to the client or the client's customer with respect to decisions or recommendations made, actions taken or courses of conduct implemented by either the client or the client's customer as a result of or based upon the Test Results. In no event shall the Company be liable to the client with respect to the Test Results except for the Company's own willful misconduct or gross negligence nor shall the Company be liable for incidental or consequential damages or lost profits or revenues to the fullest extent such liability may be disclaimed by law, even if the Company has been advised of the possibility of such damages, lost profits or lost revenues. In no event shall the Company's liability with respect to the Test Results exceed the amount paid to the Company by the client therefor.

Client: Terracon Consultants, Inc. - Tustin, CA

C/O: Denise Wallen

Re: NA227079; LUSD Lakewood Elem School Pre-
 Reno HazMat Survey

Date of Receipt: 10-10-2022

Date of Report: 11-16-2022

ASBESTOS POINT COUNT REPORT

Location:	E-15A Perimeter Drywall w/ Joint Compound; E101 South Wall East Corner		
Total Points Counted:	400		
Lab ID-Version‡:	14867371-1		
Sample Layers	Asbestos Type	Asbestos Points Counted	Asbestos Concentration (%)
White Joint Compound with Drywall (Composite)	Chrysotile	1	0.25
Layer Totals:		1	0.25

Location:	E-15B Perimeter Drywall w/ Joint Compound; E101 East Wall South Corner		
Total Points Counted:	400		
Lab ID-Version‡:	14867372-1		
Sample Layers	Asbestos Type	Asbestos Points Counted	Asbestos Concentration (%)
White Joint Compound with Drywall (Composite)	Chrysotile	1	0.25
Layer Totals:		1	0.25

Location:	E-15C Perimeter Drywall w/ Joint Compound; E101 North West Door		
Total Points Counted:	400		
Lab ID-Version‡:	14867373-1		
Sample Layers	Asbestos Type	Asbestos Points Counted	Asbestos Concentration (%)
White Joint Compound with Drywall	Chrysotile	0	< 0.25
Layer Totals:		0	NA

Comments: Asbestos was detected, but no points counted.

The analytical sensitivity is 1 asbestos point. The limit of detection is 1 asbestos point divided by the total number of points counted and multiplied by 100.

The results relate only to the items tested. Interpretation is left to the company and/or persons who conducted the field work. The test report shall not be reproduced except in full, without written approval of the laboratory. The report must not be used by the client to claim product certification, approval, or endorsement by any agency of the federal government.

All samples were received in acceptable condition unless otherwise noted. The Company reserves the right to dispose of all samples after a period of thirty (30) days, according to all state and federal guidelines, unless otherwise specified.

Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.

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Client: Terracon Consultants, Inc. - Tustin, CA

C/O: Denise Wallen

Re: NA227079; LUSD Lakewood Elem School Pre-
Reno HazMat Survey

Date of Receipt: 10-10-2022

Date of Report: 11-16-2022

ASBESTOS POINT COUNT REPORT

Location:	E-16A Partition Drywall; E103 South Wall		
Total Points Counted:	400		
Lab ID-Version‡:	14867374-1		
Sample Layers	Asbestos Type	Asbestos Points Counted	Asbestos Concentration (%)
White Joint Compound with Drywall (Composite)	Chrysotile	0	< 0.25
Layer Totals:		0	NA

Comments: Asbestos was detected, but no points counted.

Location:	E-16B Partition Drywall; E103 East Wall		
Total Points Counted:	400		
Lab ID-Version‡:	14867375-1		
Sample Layers	Asbestos Type	Asbestos Points Counted	Asbestos Concentration (%)
White Joint Compound with Drywall (Composite)	Chrysotile	0	< 0.25
Layer Totals:		0	NA

Comments: Asbestos was detected, but no points counted.

The analytical sensitivity is 1 asbestos point. The limit of detection is 1 asbestos point divided by the total number of points counted and multiplied by 100.

The results relate only to the items tested. Interpretation is left to the company and/or persons who conducted the field work. The test report shall not be reproduced except in full, without written approval of the laboratory. The report must not be used by the client to claim product certification, approval, or endorsement by any agency of the federal government.

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003052751

1220 Concord Avenue, Suite 450

Concord, CA 94520

P (925) 609-7224

Terracon.com

E-MAIL REPORT TO:		<input checked="" type="checkbox"/> tony.mikacich@terracon.com Project Manager		Asbestos Bulk Samples	
		<input checked="" type="checkbox"/> denise.wallen@terracon.com Project Assistant		PLM Analysis - Analyze all samples	
				EMLabPK TAT: 3-5 days	
Project #:	NA227079	Project Address:	1100 N Ham Lane, Lodi	Sampling Date:	10/05/2022 - 10/07/2022
Project Name:	LUSD Lakewood Elem School Pre-reno HazMat Survey			Sampled By:	J. Alexander & W. Renner
Building Name / Area:			Building E	Page 1 of 4	

HM#	Material Description	Sample ID	Sample Location & Material Location	Quantity
E-01	Main rolled roof field			
E-1A	South Awning			2,250 sq. ft.
E-1B	East main roof			
E-1C	West main roof			
E-02	Black Penetration mastic			
E-2A	NW Pipe penetration			5 sq. ft.
E-2B	SW Pipe penetration			
E-03	Black window gasket			
E-3A	SE exterior window			375 sq. ft.
E-3B	South Center exterior window			
E-3C	NW Exterior window			
E-04	White Window Caulk			
E-4A	South exterior window East			375 lin. ft.
E-4B	South Exterior Window Center			
E-4C	SW Exterior near drinking fountain			
E-05	Black building Sealant			
E-5A	SW exterior			200 lin. ft.
E-5B	SW exterior			
E-5C	SE exterior			

Relinquished By:

Received By:

Relinquished By:

Received By:

Signature:

Signature:

Signature:

Signature:

Date/Time:

Date/ Time:

Date/Time:

Date/Time:

10/7/22

10/10/22 9:20am



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E-MAIL REPORT TO:		<input checked="" type="checkbox"/> tony.mikacich@terracon.com Project Manager		Asbestos Bulk Samples	
		<input checked="" type="checkbox"/> denise.wallen@terracon.com Project Assistant		PLM Analysis - Analyze all samples	
				EMLabPK TAT: 3-5 days	
Project #:	NA227079	Project Address:	1100 N Ham Lane, Lodi	Sampling Date:	10/05/2022 - 10/07/2022
Project Name:	LUSD Lakewood Elem School Pre-reno HazMat Survey			Sampled By:	J. Alexander & W. Renner
Building Name / Area:			Building E	Page 2 of 4	

HM# E-06	Material Description	VFT w/black mastic	Quantity
Sample ID	Sample Location & Material Location		
E-6A	E101 NW		1,050 sq ft
E-6B	E101 Center		
E-6C	E101 SE		
HM# E-07	Material Description:	Yellow carpet adhesive	Quantity
Sample ID	Sample Location & Material Location		
E-7A	E101 NW		1,050 sq ft
E-7B	E101 Center		
E-7C	E101 SE		
HM# E-08	Material Description:	Gray Vinyl sheet flooring w/burly & adhesive	Quantity
Sample ID	Sample Location & Material Location		
E-8A	South restroom		40 sq. ft
E-8B	South restroom		
E-8C	Southwest restroom		
HM# E-09	Material Description:	Yellow wainscot adhesive	Quantity
Sample ID	Sample Location & Material Location		
E-9A	West wall restroom		60 sq. ft
E-9B	West wall restroom		
C			
HM# E-10	Material Description:	Concrete pad	Quantity
Sample ID	Sample Location & Material Location		
E-10A	South side Patio East		400 sq. ft
E-10B	South side Patio East		
E-10C	South side Patio West		

Relinquished By:

W. J. J. J.

Signature:

W. J. J. J.

Date/Time:

10/7/22

Received By:

Arthur V. V. V.

Signature:

Arthur V. V. V.

Date/Time:

10/10/22 4:30pm

Relinquished By:

Signature:

Date/Time:

Received By:

Signature:

Date/Time:



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Concord, CA 94520

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E-MAIL REPORT TO:		<input checked="" type="checkbox"/> tony.mikacich@terracon.com Project Manager		Asbestos Bulk Samples	
		<input checked="" type="checkbox"/> denise.wallen@terracon.com Project Assistant		PLM Analysis - Analyze all samples	
				EMLabPK TAT: 3-5 days	
Project #:	NA227079	Project Address:	1100 N Ham Lane, Lodi	Sampling Date:	10/05/2022 - 10/07/2022
Project Name:	LUSD Lakewood Elem School Pre-reno HazMat Survey			Sampled By:	J. Alexander & W. Renner
Building Name / Area:			Building E	Page 3 of 4	

HM# E-11	Material Description	Asphalt	
Sample ID	Sample Location & Material Location		Quantity
E-11A	South side playground West		2.50 sq. ft
E-11B	South side playground Center		
E-11C	South side playground East		
HM# E-12	Material Description:	Black sink undercounting	
Sample ID	Sample Location & Material Location		Quantity
E-12A	Adult Sink		4 sq. ft
E-12B	Adult Sink		
C			
HM# E-13	Material Description:	Beige sink undercounting	
Sample ID	Sample Location & Material Location		Quantity
E-13A	Kids Sink		4 sq. ft
E-13B	Kids Sink		
C			
HM# E-14	Material Description:	4 in core w/ brown & white glue	
Sample ID	Sample Location & Material Location		Quantity
E-14A	E101 SE corner		60 sq. ft
E-14B	E101 North door		
E-14C	E101 SE near bathroom door		
HM# E-15	Material Description:	Perimeter drywall w/ joint compound	
Sample ID	Sample Location & Material Location		Quantity
E-15A	E101 South wall East corner		1.20 sq. ft
E-15B	E101 East wall South corner		
E-15C	E101 North west door		

Relinquished By:

Wyatt Perry

Signature:

Date/Time:

10/7/22

Received By:

Arthur Venegas Pardo

Signature:

Date/Time:

10/10/22 9:30am

Relinquished By:

Signature:

Date/Time:

Received By:

Signature:

Date/Time:



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E-MAIL REPORT TO:		<input checked="" type="checkbox"/> tony.mikacich@terracon.com Project Manager		Asbestos Bulk Samples	
		<input checked="" type="checkbox"/> denise.wallin@terracon.com Project Assistant		PLM Analysis - Analyze all samples	
				EMLabPK TAT: 3-5 days	
Project #:	NA227079	Project Address:	1100 N Ham Lane, Lodi	Sampling Date:	10/05/2022 - 10/07/2022
Project Name:	LUSD Lakewood Elem School Pre-reno HazMat Survey			Sampled By:	J. Alexander & W. Renner
Building Name / Area:		Building E		Page 4 of 4	

HM# E-16	Material Description	Partition drywall	
Sample ID	Sample Location & Material Location		Quantity
E-16A	E103 South wall		450 sq. ft
E-16B	E103 East wall		
E-16C			
HM# E-17	Material Description:	1x2 ACT (nailed in)	
Sample ID	Sample Location & Material Location		Quantity
E-17A	Adult Sinks Ceiling		1,200 sq. ft
E-17B	K-7s Sink Ceiling		
E-17C	South exit door		
HM# E-18	Material Description:	Concrete Slab	
Sample ID	Sample Location & Material Location		Quantity
E-18A	South West Slab		1200 ² ft
E-18B	↓	↓	
E-18C			
HM#	Material Description:		
Sample ID	Sample Location & Material Location		Quantity
A			
B			
C			
HM#	Material Description:		
Sample ID	Sample Location & Material Location		Quantity
A			
B			
C			

Relinquished By:

Wyatt Rm

Signature:

Date/Time:

10/7/22

Received By:

Arthur Vazquez Basso

Signature:

Date/Time:

10/10/22

Relinquished By:

Received By:

Signature:

Date/Time:



003052675

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Concord, CA 94520

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Terracon.com

E-MAIL REPORT TO:		<input checked="" type="checkbox"/> tony.mikacich@terracon.com Project Manager		Lead in Paint & Bulk Samples FLAME AA Analysis / TTLC EMLabPK TAT: 3-5 days	
Project #:		NA227079	Project Address:	1100 N Ham Lane, Lodi	Sampling Date:
Project Name:		LUSD Lakewood Elem School Pre-reno HazMat Survey			Sampled By:
Building Name / Area:		Building E			Page 1 of 1

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Relinquished By:

Wyatt Renner

Signature: _____

Wright

Date/Time:

10/7/22

Received By:

ANDREW ARESTEGU

Signature: _____

Date/ Time:

10/10/22 9:30

Relinquished By:

Signature:

Date/Time:

Received By:

Signature:

Date/Time:

Report for:

Denise Wallen
Terracon Consultants, Inc. - Tustin, CA
23041 Avenida De La Carlota
Suite 350
Laguna Hills, CA 92653

Regarding: Eurofins EPK Built Environment Testing, LLC
Project: NA227079; LUSD Lakewood Elem School Pre-Reno HazMat Survey
EML ID: 3052737

Approved by:



Approved Signatory
Danny Li

Dates of Analysis:
Asbestos PLM: 10-17-2022

Service SOPs: Asbestos PLM (EPA 40CFR App E to Sub E of Part 763 & EPA METHOD 600/R-93-116, SOP EM-AS-S-1267)
NVLAP Lab Code 200757-0

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Eurofins EPK Built Environment Testing, LLC

2841 Dow Avenue, Suite 300, Tustin, CA 92780

(866) 888-6653 www.eurofinsus.com/Built

Client: Terracon Consultants, Inc. - Tustin, CA

C/O: Denise Wallen

Re: NA227079; LUSD Lakewood Elem School Pre-
Reno HazMat Survey

Date of Receipt: 10-10-2022

Date of Report: 10-17-2022

ASBESTOS PLM REPORT**Total Samples Submitted:** 9**Total Samples Analyzed:** 9**Total Samples with Layer Asbestos Content > 1%:** 9**Location: P-01A, Black Sealant, North Side Building F**

Lab ID-Version‡: 14723867-1

Sample Layers	Asbestos Content
Black Sealant	4% Chrysotile
Sample Composite Homogeneity:	Good

Location: P-01B, Black Sealant, North Side Building F

Lab ID-Version‡: 14723868-1

Sample Layers	Asbestos Content
Black Sealant	4% Chrysotile
Sample Composite Homogeneity:	Good

Location: P-01C, Black Sealant, North Side Building F

Lab ID-Version‡: 14723869-1

Sample Layers	Asbestos Content
Black Sealant	4% Chrysotile
Sample Composite Homogeneity:	Good

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Client: Terracon Consultants, Inc. - Tustin, CA

C/O: Denise Wallen

Re: NA227079; LUSD Lakewood Elem School Pre-
Reno HazMat Survey

Date of Receipt: 10-10-2022

Date of Report: 10-17-2022

ASBESTOS PLM REPORT

Location: P-02A, Black Sealant, South Side Building G1

Lab ID-Version‡: 14723870-1

Sample Layers	Asbestos Content
Black Sealant	3% Chrysotile
Sample Composite Homogeneity: Good	

Location: P-02B, Black Sealant, South Side Building G1

Lab ID-Version‡: 14723871-1

Sample Layers	Asbestos Content
Black Sealant	3% Chrysotile
Sample Composite Homogeneity: Good	

Location: P-02C, Black Sealant, South Side Building G1

Lab ID-Version‡: 14723872-1

Sample Layers	Asbestos Content
Black Sealant	3% Chrysotile
Sample Composite Homogeneity: Good	

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Client: Terracon Consultants, Inc. - Tustin, CA

C/O: Denise Wallen

Re: NA227079; LUSD Lakewood Elem School Pre-
Reno HazMat Survey

Date of Receipt: 10-10-2022

Date of Report: 10-17-2022

ASBESTOS PLM REPORT

Location: P-03A, Black Sealant, South Side Building G

Lab ID-Version‡: 14723873-1

Sample Layers	Asbestos Content
Black Sealant	3% Chrysotile
Sample Composite Homogeneity: Good	

Location: P-03B, Black Sealant, South Side Building G

Lab ID-Version‡: 14723874-1

Sample Layers	Asbestos Content
Black Sealant	3% Chrysotile
Sample Composite Homogeneity: Good	

Location: P-03C, Black Sealant, South Side Building G

Lab ID-Version‡: 14723875-1

Sample Layers	Asbestos Content
Black Sealant	3% Chrysotile
Sample Composite Homogeneity: Good	

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003052737

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E-MAIL REPORT TO:		<input checked="" type="checkbox"/> tony.mikacich@terracon.com Project Manager		Asbestos Bulk Samples	
		<input checked="" type="checkbox"/> denise.wallen@terracon.com Project Assistant		PLM Analysis - Analyze all samples	
				EMLabPK TAT: 3-5 days	
Project #:	NA227079	Project Address:	1100 N Ham Lane, Lodi	Sampling Date:	10/05/2022 – 10/07/2022
Project Name:	LUSD Lakewood Elem School Pre-reno HazMat Survey			Sampled By:	J. Alexander & W. Renner
Building Name / Area:		Portable roof		Page <u>1</u> of <u>1</u>	

HM# P-01	Material Description	Black Sealant	
Sample ID	Sample Location & Material Location		Quantity
P-1A	North side building F		10 sq ft
P-1B	South side building G1	↓	
P-1C	South side building G	↓	

HM# P-02	Material Description:	Black Sealant	
Sample ID	Sample Location & Material Location		Quantity
A	South side Building G1		10 ² ft
B	↓		
C	↓		

HM# P-03	Material Description:	Black Sealant	
Sample ID	Sample Location & Material Location		Quantity
A	South side Building G		10 ² ft
B	↓		
C	↓		

HM#	Material Description:		
Sample ID	Sample Location & Material Location		Quantity
A			
B			
C			

HM#	Material Description:		
Sample ID	Sample Location & Material Location		Quantity
A			
B			
C			

Relinquished By:	<u>Wyatt Renner</u>	Signature:	<u>[Signature]</u>	Date/Time:	<u>10/7/22</u>
Received By:	<u>ANDREW ARESTEGUI</u>	Signature:	<u>[Signature]</u>	Date/Time:	<u>10/10/22 9:30A</u>
Relinquished By:		Signature:		Date/Time:	
Received By:		Signature:		Date/Time:	

Report for:

Denise Wallen
Terracon Consultants, Inc. - Tustin, CA
23041 Avenida De La Carlota
Suite 350
Laguna Hills, CA 92653

Regarding: Eurofins EPK Built Environment Testing, LLC
Project: NA227079; 1100 N Ham Lane, Lodi, LUSD Lakewood Elem School Pre-reno Hazmat Survey
EML ID: 3052726

Approved by:



Approved Signatory
Danny Li

Dates of Analysis:
Asbestos PLM: 10-15-2022

Service SOPs: Asbestos PLM (EPA 40CFR App E to Sub E of Part 763 & EPA METHOD 600/R-93-116, SOP EM-AS-S-1267)
NVLAP Lab Code 200757-0

All samples were received in acceptable condition unless noted in the Report Comments portion in the body of the report. The results relate only to the samples as received and tested. The results include an inherent uncertainty of measurement associated with estimating percentages by polarized light microscopy. Measurement uncertainty data for sample results with >1% asbestos concentration can be provided when requested.

Eurofins EPK Built Environment Testing, LLC ("the Company"), a member of the Eurofins Built Environment Testing group of companies, shall have no liability to the client or the client's customer with respect to decisions or recommendations made, actions taken or courses of conduct implemented by either the client or the client's customer as a result of or based upon the Test Results. In no event shall the Company be liable to the client with respect to the Test Results except for the Company's own willful misconduct or gross negligence nor shall the Company be liable for incidental or consequential damages or lost profits or revenues to the fullest extent such liability may be disclaimed by law, even if the Company has been advised of the possibility of such damages, lost profits or lost revenues. In no event shall the Company's liability with respect to the Test Results exceed the amount paid to the Company by the client therefor.

Eurofins EPK Built Environment Testing, LLC

2841 Dow Avenue, Suite 300, Tustin, CA 92780

(866) 888-6653 www.eurofinsus.com/Built

Client: Terracon Consultants, Inc. - Tustin, CA
C/O: Denise Wallen
Re: NA227079; 1100 N Ham Lane, Lodi, LUSD
Lakewood Elem School Pre-reno Hazmat Survey

Date of Sampling: 10-05-2022

Date of Receipt: 10-10-2022

Date of Report: 10-17-2022

ASBESTOS PLM REPORT**Total Samples Submitted:** 21**Total Samples Analyzed:** 21**Total Samples with Layer Asbestos Content > 1%:** 0**Location: S-1A, Smooth White Concrete, Courtyard West**

Lab ID-Version‡: 14721661-1

Sample Layers	Asbestos Content
Gray Concrete	ND
Sample Composite Homogeneity: Good	

Location: S-1B, Smooth White Concrete, Courtyard West

Lab ID-Version‡: 14721662-1

Sample Layers	Asbestos Content
Gray Concrete	ND
Sample Composite Homogeneity: Good	

Location: S-1C, Smooth White Concrete, North of Building D

Lab ID-Version‡: 14721663-1

Sample Layers	Asbestos Content
Gray Concrete	ND
Sample Composite Homogeneity: Good	

Location: S-2A, Aggregate Concrete, North Courtyard

Lab ID-Version‡: 14721664-1

Sample Layers	Asbestos Content
Light Gray Concrete	ND
Dark Gray Concrete	ND
Sample Composite Homogeneity: Good	

The test report shall not be reproduced except in full, without written approval of the laboratory. The report must not be used by the client to claim product certification, approval, or endorsement by any agency of the federal government. The Company reserves the right to dispose of all samples after a period of thirty (30) days, according to all state and federal guidelines, unless otherwise specified.

Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.

‡ A "Version" indicated by "-x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

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Client: Terracon Consultants, Inc. - Tustin, CA

C/O: Denise Wallen

Re: NA227079; 1100 N Ham Lane, Lodi, LUSD

Lakewood Elem School Pre-reno Hazmat Survey

Date of Sampling: 10-05-2022

Date of Receipt: 10-10-2022

Date of Report: 10-17-2022

ASBESTOS PLM REPORT**Location: S-2B, Aggregate Concrete, Center Courtyard**

Lab ID-Version‡: 14721665-1

Sample Layers	Asbestos Content
Light Gray Concrete	ND
Sample Composite Homogeneity:	Good

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Client: Terracon Consultants, Inc. - Tustin, CA
C/O: Denise Wallen
Re: NA227079; 1100 N Ham Lane, Lodi, LUSD
Lakewood Elem School Pre-reno Hazmat Survey

Date of Sampling: 10-05-2022

Date of Receipt: 10-10-2022

Date of Report: 10-17-2022

ASBESTOS PLM REPORT**Location: S-2C, Aggregate Concrete, South Courtyard**

Lab ID-Version‡: 14721666-1

Sample Layers	Asbestos Content
Light Gray Concrete	ND
Sample Composite Homogeneity:	Good

Location: S-3A, Asphalt, NE Area South East Side

Lab ID-Version‡: 14721667-1

Sample Layers	Asbestos Content
Black Asphalt	ND
Sample Composite Homogeneity:	Good

Location: S-3B, Asphalt, NE Area Center

Lab ID-Version‡: 14721668-1

Sample Layers	Asbestos Content
Black Asphalt	ND
Sample Composite Homogeneity:	Good

Location: S-3C, Asphalt, NE Area North West

Lab ID-Version‡: 14721669-1

Sample Layers	Asbestos Content
Black Asphalt	ND
Sample Composite Homogeneity:	Good

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Client: Terracon Consultants, Inc. - Tustin, CA
C/O: Denise Wallen
Re: NA227079; 1100 N Ham Lane, Lodi, LUSD
Lakewood Elem School Pre-reno Hazmat Survey

Date of Sampling: 10-05-2022

Date of Receipt: 10-10-2022

Date of Report: 10-17-2022

ASBESTOS PLM REPORT**Location: S-4A, Asphalt, NW Parking Lot South Side**

Lab ID-Version‡: 14721670-1

Sample Layers	Asbestos Content
Black Asphalt	ND
Sample Composite Homogeneity:	Good

Location: S-4B, Asphalt, NW Parking Lot Center

Lab ID-Version‡: 14721671-1

Sample Layers	Asbestos Content
Black Asphalt	ND
Sample Composite Homogeneity:	Good

Location: S-4C, Asphalt, NW Parking Lot North

Lab ID-Version‡: 14721672-1

Sample Layers	Asbestos Content
Black Asphalt	ND
Sample Composite Homogeneity:	Good

Location: S-5A, Asphalt, South Area West

Lab ID-Version‡: 14721673-1

Sample Layers	Asbestos Content
Black Asphalt	ND
Sample Composite Homogeneity:	Good

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Client: Terracon Consultants, Inc. - Tustin, CA
C/O: Denise Wallen
Re: NA227079; 1100 N Ham Lane, Lodi, LUSD
Lakewood Elem School Pre-reno Hazmat Survey

Date of Sampling: 10-05-2022

Date of Receipt: 10-10-2022

Date of Report: 10-17-2022

ASBESTOS PLM REPORT**Location: S-5B, Asphalt, South Area Center**

Lab ID-Version‡: 14721674-1

Sample Layers	Asbestos Content
Black Asphalt	ND
Sample Composite Homogeneity:	Good

Location: S-5C, Asphalt, South Area East

Lab ID-Version‡: 14721675-1

Sample Layers	Asbestos Content
Black Asphalt	ND
Sample Composite Homogeneity:	Good

Location: S-6A, Course Concrete, Courtyard East

Lab ID-Version‡: 14721676-1

Sample Layers	Asbestos Content
Gray Concrete	ND
Sample Composite Homogeneity:	Good

Location: S-6B, Course Concrete, Courtyard South

Lab ID-Version‡: 14721677-1

Sample Layers	Asbestos Content
Gray Concrete	ND
Sample Composite Homogeneity:	Good

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C/O: Denise Wallen
Re: NA227079; 1100 N Ham Lane, Lodi, LUSD
Lakewood Elem School Pre-reno Hazmat Survey

Date of Sampling: 10-05-2022

Date of Receipt: 10-10-2022

Date of Report: 10-17-2022

ASBESTOS PLM REPORT**Location: S-6C, Course Concrete, Courtyard North**

Lab ID-Version‡: 14721678-1

Sample Layers	Asbestos Content
Gray Concrete	ND
Sample Composite Homogeneity: Good	

Location: S-7A, Expansion Joint, Courtyard North Side

Lab ID-Version‡: 14721679-1

Sample Layers	Asbestos Content
Gray Expansion Joint	ND
Sample Composite Homogeneity: Good	

Location: S-7B, Expansion Joint, Courtyard North Side

Lab ID-Version‡: 14721680-1

Sample Layers	Asbestos Content
Gray Expansion Joint	ND
Sample Composite Homogeneity: Good	

Location: S-7C, Expansion Joint, Courtyard North Side

Lab ID-Version‡: 14721681-1

Sample Layers	Asbestos Content
Gray Expansion Joint	ND
Sample Composite Homogeneity: Good	

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003052726

1220 Concord Avenue, Suite 450

Concord, CA 94520

P (925) 609-7224

Terracon.com

E-MAIL REPORT TO:		<input checked="" type="checkbox"/> tony.mikacich@terracon.com Project Manager		Asbestos Bulk Samples PLM Analysis - Analyze all samples EMLabPK TAT: 3-5 days	
		<input checked="" type="checkbox"/> denise.wallin@terracon.com Project Assistant			
Project #:	NA227079	Project Address:	1100 N Ham Lane, Lodi	Sampling Date:	10/05/2022 - 10/07/2022
Project Name:	LUSD Lakewood Elem School Pre-reno HazMat Survey			Sampled By:	J. Alexander & W. Renner
Building Name / Area:			Site	Page 1 of 2	

HM# S-01	Material Description	Smooth white concrete	Quantity
Sample ID	Sample Location & Material Location		
S-1 A	Court yard west		6,000 sq ft
S-1 B	Court yard west		3,000 sq ft
S-1 C	North of building D		5,000 sq ft
HM# S-02	Material Description:	Aggregate concrete	Quantity
Sample ID	Sample Location & Material Location		
S-2 A	North courtyard		3,000 sq ft
S-2 B	Center courtyard		
S-2 C	South courtyard		
HM# S-03	Material Description:	Asphalt	Quantity
Sample ID	Sample Location & Material Location		
S-3 A	NE Area South East side		20,000 sq ft
S-3 B	NE Area Center		
S-3 C	NE Area North West		
HM# S-04	Material Description:	Asphalt	Quantity
Sample ID	Sample Location & Material Location		
S-4 A	NW Parking lot South Side		10,000 sq ft
S-4 B	NW Parking lot Center		
S-4 C	NW Parking lot North		
HM# S-05	Material Description:	Asphalt	Quantity
Sample ID	Sample Location & Material Location		
S-5 A	South area west		15,000 sq ft
S-5 B	South area Center		
S-5 C	South area East		

Relinquished By:

Wyatt Renner

Signature:

Wyatt Renner

Date/Time:

10/7/22

Received By:

ANDREW ARETEGUILLO

Signature:

Andrew Areteguillo

Date/Time:

10/10/22 9:30 A

Relinquished By:

Signature:

Date/Time:

Received By:

Signature:

Date/Time:



003052726

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Concord, CA 94520

P (925) 609-7224

Terracon.com

E-MAIL REPORT TO:		<input checked="" type="checkbox"/> tony.mikacich@terracon.com Project Manager		Asbestos Bulk Samples	
		<input checked="" type="checkbox"/> denise.wallen@terracon.com Project Assistant		PLM Analysis - Analyze all samples	
				EMLabPK TAT: 3-5 days	
Project #:	NA227079	Project Address:	1100 N Ham Lane, Lodi	Sampling Date:	10/05/2022 - 10/07/2022
Project Name:	LUSD Lakewood Elem School Pre-reno HazMat Survey			Sampled By:	J. Alexander & W. Renner
Building Name / Area:		Site		Page 2 of 2	

HM# 5-06	Material Description	Coarse concrete
Sample ID	Sample Location & Material Location	Quantity
5-6A	Courtyard East	7,000 lb
5-6B	Courtyard South	14,000
5-6C	Courtyard North	
HM# 5-07	Material Description:	Expansion Joint
Sample ID	Sample Location & Material Location	Quantity
5-7A	Courtyard North Side	12 lb
5-7B	Courtyard North Side	
5-7C	Courtyard North Side	
HM#	Material Description:	
Sample ID	Sample Location & Material Location	Quantity
A		
B		
C		
HM#	Material Description:	
Sample ID	Sample Location & Material Location	Quantity
A		
B		
C		
HM#	Material Description:	
Sample ID	Sample Location & Material Location	Quantity
A		
B		
C		

Relinquished By: Wyatt Renner

Received By: ANDREW ARESTEGUI

Relinquished By:

Received By:

Signature:

Signature:

Signature:

Signature:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

10/7/22

10/10/22 9:30A

APPENDIX C

LEAD ANALYTICAL LABORATORY DATA

Report for:

Denise Wallen
Terracon Consultants, Inc. - Tustin, CA
23041 Avenida De La Carlota
Suite 350
Laguna Hills, CA 92653

Regarding: Eurofins EPK Built Environment Testing, LLC
Project: NA227079; LUSD Lakewood Elem School Pre-Reno HazMat Survey
EML ID: 3052672

Approved by:



Laboratory Manager
Danny Li

Dates of Analysis:

Lead - Flame AA: 10-12-2022 and 10-17-2022

Service SOPs: Lead - Flame AA (EM-BC-S-8443)
AIHA-LAP, LLC accredited service, Lab ID #178697

All samples were received in acceptable condition unless noted in the Report Comments portion in the body of the report. Due to the nature of the analyses performed, field blank correction of results is not applied. The results relate only to the samples as received and tested. Sample size, as it relates to Wipe samples only, is supplied by the client.

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Eurofins EPK Built Environment Testing, LLC's LabServe® reporting system includes automated fail-safes to ensure that all AIHA-LAP, LLC quality requirements are met and notifications are added to reports when any quality steps remain pending.

Eurofins EPK Built Environment Testing, LLC

2841 Dow Avenue, Suite 300, Tustin, CA 92780

(866) 888-6653 www.eurofinsus.com/Built

Client: Terracon Consultants, Inc. - Tustin, CA

C/O: Denise Wallen

Re: NA227079; LUSD Lakewood Elem School Pre-
Reno HazMat Survey

Date of Receipt: 10-10-2022

Date of Report: 10-17-2022

LEAD: FLAME ATOMIC ABSORPTION SPECTROMETRY

Location:	Pb-A-01: Light Blue, Girls Restroom A104 Behind Door	Pb-A-02: Light Blue, Girls Restroom A107 at Drain	Pb-A-03: Dark Green, Boys Restroom A105 Central Floor	Pb-A-04: Light Green, Boys Restroom A109 Behind Door
Comments (see below)	None	None	None	None
Lab ID-Version‡:	14724271-1	14724272-1	14724273-1	14724274-1
Analysis Date:	10/17/2022	10/17/2022	10/17/2022	10/17/2022
Sample type	Bulk sample	Bulk sample	Bulk sample	Bulk sample
Method*	NIOSH 7082 & EPA 7000B modified	NIOSH 7082 & EPA 7000B modified	NIOSH 7082 & EPA 7000B modified	NIOSH 7082 & EPA 7000B modified
† Method Reporting Limit	39 ppm	39 ppm	40 ppm	40 ppm
Sample size	0.2586 grams	0.2563 grams	0.2530 grams	0.2512 grams
§Total Lead Result	220 ppm	< 39 ppm	< 40 ppm	< 40 ppm

Comments:

Sample results have not been corrected for blank values.

Bulk samples are not covered under the AIHA-LAP, LLC service accreditation.

Wipe samples must meet ASTM E1792 criteria. Method Reporting Limits may not be valid for non-ASTM E1792 wipe samples.

*Sample preparation and analytical methods are based upon NIOSH 7082 and EPA 7000B.

† The Method Reporting Limit is the minimum concentration of Lead that the laboratory can confidently detect in the sample.

§ Total Lead Result has been rounded to two significant figures to reflect analytical precision.

‡ A "Version" indicated by "-x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

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C/O: Denise Wallen

Re: NA227079; LUSD Lakewood Elem School Pre-
Reno HazMat Survey

Date of Receipt: 10-10-2022

Date of Report: 10-17-2022

LEAD: FLAME ATOMIC ABSORPTION SPECTROMETRY

Location:	Pb-A-05: Brown, A101 24 in Duct at Ceiling	Pb-A-06: White, Classroom A101 SE Behind Door	Pb-A-07: Beige, Upper Lower Transition Wall East	Pb-A-08: White, A102 West Exterior Window
Comments (see below)	None	None	None	None
Lab ID-Version‡:	14724275-1	14724276-1	14724277-1	14724278-1
Analysis Date:	10/17/2022	10/12/2022	10/12/2022	10/17/2022
Sample type	Paint Chip sample	Paint Chip sample	Paint Chip sample	Bulk sample
Method*	NIOSH 7082 & EPA 7000B modified	NIOSH 7082 & EPA 7000B modified	NIOSH 7082 & EPA 7000B modified	NIOSH 7082 & EPA 7000B modified
† Method Reporting Limit	39 ppm	39 ppm	40 ppm	39 ppm
Sample size	0.2540 grams	0.2565 grams	0.2517 grams	0.2596 grams
§ Total Lead Result	< 39 ppm	800 ppm	< 40 ppm	61 ppm

Comments:

Sample results have not been corrected for blank values.

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*Sample preparation and analytical methods are based upon NIOSH 7082 and EPA 7000B.

† The Method Reporting Limit is the minimum concentration of Lead that the laboratory can confidently detect in the sample.

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003052672

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Terracon.com

E-MAIL REPORT TO:		<input checked="" type="checkbox"/> <u>tony.mikacich@terracon.com</u> Project Manager		Lead in Paint & Bulk Samples	
		<input checked="" type="checkbox"/> <u>denise.wallen@terracon.com</u> Project Assistant		FLAME AA Analysis / TTLC	
				EMLabPK TAT: 3-5 days	
Project #:	NA227079	Project Address:	1100 N Ham Lane, Lodi	Sampling Date:	10/05/2022 - 10/07/2022
Project Name:	LUSD Lakewood Elem School Pre-reno HazMat Survey			Sampled By:	J. Alexander & W. Renner
Building Name / Area:		Building A		Page 1 of 1	

Sample #	Color:	Paint or Bulk	Size of Ceramic	Substrate	Component	Location	Condition (I/F/P)
Examples:		P or B	ie. 4"x4"	DW / Metal / Concrete / Stucco	Wall / Door / Frame / Sill		
Pb-A-01	light blue	Bulk	4"x4" wall	DW	wall	Girls restroom A107 behind door	I
Pb-A-02	light blue	B	1"x1" floor	concrete	floor	Girls restroom A107 at drain	I
Pb-A-03	Dark Green	B	1"x1" floor	ceramic	floor	Boys restroom A109 east floor	I
Pb-A-04	light Green	B	4"x4" wall	ceramic	wall	Boys restroom A109 behind door	I
Pb-A-05	Brown	P	—	metal	duct	classroom A101 24 in duct at ceiling	I
Pb-A-06	white	P	—	DW/wall paper	wall	Classroom A101 SE behind door	I
Pb-A-07	Beige	P	—	wall	rock wall	upper lower transition wall east	I
Pb-A-08	white	B	—	metal	window curbside	A102 west exterior window	I
Pb-							
Pb-							
Pb-							
Pb-							
Pb-							
Pb-							
Pb-							
Pb-							

Relinquished By: JL AlexanderSignature: [Signature]Date/Time: 10/7/22Received By: ANDREW ARESTEGUISignature: [Signature]Date/Time: 10/10/22 9:30 A

Relinquished By: _____

Signature: _____

Date/Time: _____

Received By: _____

Signature: _____

Date/Time: _____

Report for:

Denise Wallen
Terracon Consultants, Inc. - Tustin, CA
23041 Avenida De La Carlota
Suite 350
Laguna Hills, CA 92653

Regarding: Eurofins EPK Built Environment Testing, LLC
Project: NA227079; LUSD Lakewood Elem School Pre-Reno HazMat Survey
EML ID: 3052668

Approved by:



Laboratory Manager
Danny Li

Dates of Analysis:

Lead - Flame AA: 10-12-2022 and 10-17-2022

Service SOPs: Lead - Flame AA (EM-BC-S-8443)
AIHA-LAP, LLC accredited service, Lab ID #178697

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Client: Terracon Consultants, Inc. - Tustin, CA

C/O: Denise Wallen

Re: NA227079; LUSD Lakewood Elem School Pre-
Reno HazMat Survey

Date of Receipt: 10-10-2022

Date of Report: 10-17-2022

LEAD: FLAME ATOMIC ABSORPTION SPECTROMETRY

Location:	Pb-B-01: Light Blue, Girls Restroom B107 Behind Door	Pb-B-02: Blue, B107 at Drain	Pb-B-03: Light Green, B109 at Entry	Pb-B-04: Green, B109 at Drain
Comments (see below)	None	None	None	None
Lab ID-Version‡:	14724128-1	14724129-1	14724130-1	14724131-1
Analysis Date:	10/17/2022	10/17/2022	10/17/2022	10/17/2022
Sample type	Bulk sample	Bulk sample	Bulk sample	Bulk sample
Method*	NIOSH 7082 & EPA 7000B modified	NIOSH 7082 & EPA 7000B modified	NIOSH 7082 & EPA 7000B modified	NIOSH 7082 & EPA 7000B modified
† Method Reporting Limit	40 ppm	40 ppm	40 ppm	40 ppm
Sample size	0.2520 grams	0.2508 grams	0.2493 grams	0.2530 grams
§Total Lead Result	450 ppm	< 40 ppm	< 40 ppm	< 40 ppm

Comments:

Sample results have not been corrected for blank values.

Bulk samples are not covered under the AIHA-LAP, LLC service accreditation.

Wipe samples must meet ASTM E1792 criteria. Method Reporting Limits may not be valid for non-ASTM E1792 wipe samples.

*Sample preparation and analytical methods are based upon NIOSH 7082 and EPA 7000B.

† The Method Reporting Limit is the minimum concentration of Lead that the laboratory can confidently detect in the sample.

§ Total Lead Result has been rounded to two significant figures to reflect analytical precision.

‡ A "Version" indicated by "-x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

Eurofins EPK Built Environment Testing, LLC

2841 Dow Avenue, Suite 300, Tustin, CA 92780

(866) 888-6653 www.eurofinsus.com/Built

Client: Terracon Consultants, Inc. - Tustin, CA

C/O: Denise Wallen

Re: NA227079; LUSD Lakewood Elem School Pre-
Reno HazMat Survey

Date of Receipt: 10-10-2022

Date of Report: 10-17-2022

LEAD: FLAME ATOMIC ABSORPTION SPECTROMETRY

Location:	Pb-B-05: Brown, B101 Overhead 24 In Duct	Pb-B-06: White, B101 West Wall	Pb-B-07: Beige, Upper Lower Roof Transition Wall North	Pb-B-08: White, B103 West Window
Comments (see below)	None	None	None	None
Lab ID-Version‡:	14724132-1	14724133-1	14724134-1	14724135-1
Analysis Date:	10/17/2022	10/12/2022	10/12/2022	10/17/2022
Sample type	Paint Chip sample	Paint Chip sample	Paint Chip sample	Bulk sample
Method*	NIOSH 7082 & EPA 7000B modified	NIOSH 7082 & EPA 7000B modified	NIOSH 7082 & EPA 7000B modified	NIOSH 7082 & EPA 7000B modified
† Method Reporting Limit	39 ppm	39 ppm	39 ppm	39 ppm
Sample size	0.2543 grams	0.2540 grams	0.2535 grams	0.2548 grams
§ Total Lead Result	< 39 ppm	600 ppm	< 39 ppm	< 39 ppm

Comments:

Sample results have not been corrected for blank values.

Bulk samples are not covered under the AIHA-LAP, LLC service accreditation.

Wipe samples must meet ASTM E1792 criteria. Method Reporting Limits may not be valid for non-ASTM E1792 wipe samples.

*Sample preparation and analytical methods are based upon NIOSH 7082 and EPA 7000B.

† The Method Reporting Limit is the minimum concentration of Lead that the laboratory can confidently detect in the sample.

§ Total Lead Result has been rounded to two significant figures to reflect analytical precision.

‡ A "Version" indicated by "-x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".



003052668

1220 Concord Avenue, Suite 450

Concord, CA 94520

P (925) 609-7224

Terracon.com

E-MAIL REPORT TO:		<input checked="" type="checkbox"/> tony.mikacich@terracon.com Project Manager		Lead in Paint & Bulk Samples FLAME AA Analysis / TTLC EMLabPK TAT: 3-5 days	
		<input checked="" type="checkbox"/> denise.wallen@terracon.com Project Assistant			
Project #:	NA227079	Project Address:	1100 N Ham Lane, Lodi	Sampling Date:	10/05/2022 – 10/07/2022
Project Name:	LUSD Lakewood Elem School Pre-reno HazMat Survey			Sampled By:	J. Alexander & W. Renner
Building Name / Area:			Building B	Page 1 of 1	

Sample #	Color:	Paint or Bulk	Size of Ceramic	Substrate	Component	Location	Condition (I/F/P)
Examples:		P or B	ie. 4"x4"	DW / Metal / Concrete / Stucco	Wall / Door / Frame / Sill		
Pb-B-01	light blue	B	4" x 4"	DW concrete	wall	Girls restroom B107 behind door	I
Pb-B-02	blue	B	1" x 1"	marker/concrete	floor	B107 at drain	I
Pb-B-03	light green	B	4" x 4"	DW	wall	B109 at entry	I
Pb-B-04	green	B	1" x 1"	marker/concrete	floor	B109 at drain	I
Pb-B-05	brown	P	—	metal	duct	B101 overhead 24" duct	I
Pb-B-06	white	P	—	dry wall/wall paper	wall	B101 west wall	I
Pb-B-07	beige	P	—	wood	roof wall	upper lower roof transition wall work	I
Pb-B-08	white	B	—	metal	window frame	B103 west window	I
Pb-							
Pb-							
Pb-							
Pb-							
Pb-							
Pb-							
Pb-							
Pb-							

Relinquished By:

J. Alex

Signature:

Date/Time:

10/7/22

Received By:

ANDREW ARESTEGUI

Signature:

Date/Time:

10/10/22 9:30 A

Relinquished By:

Signature:

Date/Time:

Received By:

Signature:

Date/Time:

Report for:

Denise Wallen
Terracon Consultants, Inc. - Tustin, CA
23041 Avenida De La Carlota
Suite 350
Laguna Hills, CA 92653

Regarding: Eurofins EPK Built Environment Testing, LLC
Project: NA227079; LUSD Lakewood Elem School Pre-Reno HazMat Survey
EML ID: 3052678

Approved by:



Laboratory Manager
Danny Li

Dates of Analysis:

Lead - Flame AA: 10-12-2022 and 10-17-2022

Service SOPs: Lead - Flame AA (EM-BC-S-8443)
AIHA-LAP, LLC accredited service, Lab ID #178697

All samples were received in acceptable condition unless noted in the Report Comments portion in the body of the report. Due to the nature of the analyses performed, field blank correction of results is not applied. The results relate only to the samples as received and tested. Sample size, as it relates to Wipe samples only, is supplied by the client.

Eurofins EPK Built Environment Testing, LLC ("the Company"), a member of the Eurofins Built Environment Testing group of companies, shall have no liability to the client or the client's customer with respect to decisions or recommendations made, actions taken or courses of conduct implemented by either the client or the client's customer as a result of or based upon the Test Results. In no event shall the Company be liable to the client with respect to the Test Results except for the Company's own willful misconduct or gross negligence nor shall the Company be liable for incidental or consequential damages or lost profits or revenues to the fullest extent such liability may be disclaimed by law, even if the Company has been advised of the possibility of such damages, lost profits or lost revenues. In no event shall the Company's liability with respect to the Test Results exceed the amount paid to the Company by the client therefor.

Eurofins EPK Built Environment Testing, LLC's LabServe® reporting system includes automated fail-safes to ensure that all AIHA-LAP, LLC quality requirements are met and notifications are added to reports when any quality steps remain pending.

Eurofins EPK Built Environment Testing, LLC

2841 Dow Avenue, Suite 300, Tustin, CA 92780

(866) 888-6653 www.eurofinsus.com/Built

Client: Terracon Consultants, Inc. - Tustin, CA

C/O: Denise Wallen

Re: NA227079; LUSD Lakewood Elem School Pre- Date of Receipt: 10-10-2022

Reno HazMat Survey Date of Report: 10-17-2022

LEAD: FLAME ATOMIC ABSORPTION SPECTROMETRY

Location:	Pb-C-01: Beige, Upper Lower Wall Transition Wall East	Pb-C-02: Blue, C107 at Drain	Pb-C-03: Blue, C107 by Entrance
Comments (see below)	None	None	None
Lab ID-Version‡:	14724381-1	14724382-1	14724383-1
Analysis Date:	10/12/2022	10/17/2022	10/17/2022
Sample type	Paint Chip sample	Bulk sample	Bulk sample
Method*	NIOSH 7082 & EPA 7000B modified	NIOSH 7082 & EPA 7000B modified	NIOSH 7082 & EPA 7000B modified
† Method Reporting Limit	39 ppm	39 ppm	40 ppm
Sample size	0.2583 grams	0.2546 grams	0.2514 grams
§ Total Lead Result	48 ppm	< 39 ppm	64 ppm

Comments:

Sample results have not been corrected for blank values.

Bulk samples are not covered under the AIHA-LAP, LLC service accreditation.

Wipe samples must meet ASTM E1792 criteria. Method Reporting Limits may not be valid for non-ASTM E1792 wipe samples.

*Sample preparation and analytical methods are based upon NIOSH 7082 and EPA 7000B.

† The Method Reporting Limit is the minimum concentration of Lead that the laboratory can confidently detect in the sample.

§ Total Lead Result has been rounded to two significant figures to reflect analytical precision.

‡ A "Version" indicated by -"x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

Eurofins EPK Built Environment Testing, LLC

2841 Dow Avenue, Suite 300, Tustin, CA 92780

(866) 888-6653 www.eurofinsus.com/Built

Client: Terracon Consultants, Inc. - Tustin, CA

C/O: Denise Wallen

Re: NA227079; LUSD Lakewood Elem School Pre- Date of Receipt: 10-10-2022

Reno HazMat Survey Date of Report: 10-17-2022

LEAD: FLAME ATOMIC ABSORPTION SPECTROMETRY

Location:	Pb-C-04: Green, C109 by Entryway	Pb-C-05: Green, C109 Behind Foor	Pb-C-06: Gray, C101 South Wall
Comments (see below)	None	None	None
Lab ID-Version‡:	14724384-1	14724385-1	14724386-1
Analysis Date:	10/17/2022	10/17/2022	10/17/2022
Sample type	Bulk sample	Bulk sample	Bulk sample
Method*	NIOSH 7082 & EPA 7000B modified	NIOSH 7082 & EPA 7000B modified	NIOSH 7082 & EPA 7000B modified
† Method Reporting Limit	40 ppm	40 ppm	40 ppm
Sample size	0.2529 grams	0.2520 grams	0.2530 grams
§ Total Lead Result	< 40 ppm	47 ppm	< 40 ppm

Comments:

Sample results have not been corrected for blank values.

Bulk samples are not covered under the AIHA-LAP, LLC service accreditation.

Wipe samples must meet ASTM E1792 criteria. Method Reporting Limits may not be valid for non-ASTM E1792 wipe samples.

*Sample preparation and analytical methods are based upon NIOSH 7082 and EPA 7000B.

† The Method Reporting Limit is the minimum concentration of Lead that the laboratory can confidently detect in the sample.

§ Total Lead Result has been rounded to two significant figures to reflect analytical precision.

‡ A "Version" indicated by "-x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

Client: Terracon Consultants, Inc. - Tustin, CA

C/O: Denise Wallen

Re: NA227079; LUSD Lakewood Elem School Pre- Date of Receipt: 10-10-2022

Reno HazMat Survey Date of Report: 10-17-2022

LEAD: FLAME ATOMIC ABSORPTION SPECTROMETRY

Location:	Pb-C-07: Brown, C105 Duct	Pb-C-08: White, C103 N Window	Pb-C-09: White, C101 E by Door
Comments (see below)	None	None	None
Lab ID-Version‡:	14724387-1	14724388-1	14724389-1
Analysis Date:	10/17/2022	10/17/2022	10/12/2022
Sample type	Paint Chip sample	Bulk sample	Paint Chip sample
Method*	NIOSH 7082 & EPA 7000B modified	NIOSH 7082 & EPA 7000B modified	NIOSH 7082 & EPA 7000B modified
† Method Reporting Limit	40 ppm	40 ppm	39 ppm
Sample size	0.2521 grams	0.2527 grams	0.2553 grams
§ Total Lead Result	< 40 ppm	370 ppm	710 ppm

Comments:

Sample results have not been corrected for blank values.

Bulk samples are not covered under the AIHA-LAP, LLC service accreditation.

Wipe samples must meet ASTM E1792 criteria. Method Reporting Limits may not be valid for non-ASTM E1792 wipe samples.

*Sample preparation and analytical methods are based upon NIOSH 7082 and EPA 7000B.

† The Method Reporting Limit is the minimum concentration of Lead that the laboratory can confidently detect in the sample.

§ Total Lead Result has been rounded to two significant figures to reflect analytical precision.

‡ A "Version" indicated by "-x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".



003052678

1220 Concord Avenue, Suite 450

Concord, CA 94520

P (925) 609-7224

Terracon.com

E-MAIL REPORT TO:		<input checked="" type="checkbox"/> tony.mikacich@terracon.com Project Manager		Lead in Paint & Bulk Samples FLAME AA Analysis / TTLC EMLabPK TAT: 3-5 days	
		<input checked="" type="checkbox"/> denise.wallin@terracon.com Project Assistant			
Project #:	NA227079	Project Address:	1100 N Ham Lane, Lodi	Sampling Date:	10/05/2022 - 10/07/2022
Project Name:	LUSD Lakewood Elem School Pre-reno HazMat Survey			Sampled By:	J. Alexander & W. Renner
Building Name / Area:			Building C	Page 1 of 1	

Sample #	Color:	Paint or Bulk	Size of Ceramic	Substrate	Component	Location	Condition (I/F/P)
Examples:		P or B	ie. 4"x4"	DW / Metal / Concrete / Stucco	Wall / Door / Frame / Sill		
Pb-C-01	Beige	P	—	wall	rock wall	upper lower transition wall east	I
Pb-C-02	blue	Bulk	4"x1"	concrete	floor	C107 at door	I
Pb-C-03	blue	B	4"x4"	metal/dw	wall	C107 by entrance	I
Pb-C-04	green	B	1"x1"	concrete	floor	C109 by entryway	I
Pb-C-05	green	B	4"x4"	metal/dw	wall	C109 behind door	I
Pb-C-06	gray	O	—	concrete	floor	C101 south wall	I
Pb-C-07	Brown	P	—	metal	duct	C105 duct	I
Pb-C-08	white	B	—	metal	window/culvert	C103 N window	I
Pb-C-09	white	P	—	wall paper/dw	wall	C101 E by door	I
Pb-							
Pb-							
Pb-							
Pb-							
Pb-							
Pb-							

Relinquished By:

Received By:

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Signature:

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Date/Time:

Date/Time:

Date/Time:

Date/Time:

Wyatt Renner
ANDREW ARETEGU

Signature: Wyatt Renner

10/7/22

10/10/22 9:30 A

Report for:

Denise Wallen
Terracon Consultants, Inc. - Tustin, CA
23041 Avenida De La Carlota
Suite 350
Laguna Hills, CA 92653

Regarding: Eurofins EPK Built Environment Testing, LLC
Project: NA227079; LUSD Lakewood Elem School Pre-reno HazMat Survey- 1100 N Ham Lane, Lodi
EML ID: 3052683

Approved by:



Laboratory Manager
Danny Li

Dates of Analysis:

Lead - Flame AA: 10-12-2022 and 10-17-2022

Service SOPs: Lead - Flame AA (EM-BC-S-8443)
AIHA-LAP, LLC accredited service, Lab ID #178697

All samples were received in acceptable condition unless noted in the Report Comments portion in the body of the report. Due to the nature of the analyses performed, field blank correction of results is not applied. The results relate only to the samples as received and tested. Sample size, as it relates to Wipe samples only, is supplied by the client.

Eurofins EPK Built Environment Testing, LLC ("the Company"), a member of the Eurofins Built Environment Testing group of companies, shall have no liability to the client or the client's customer with respect to decisions or recommendations made, actions taken or courses of conduct implemented by either the client or the client's customer as a result of or based upon the Test Results. In no event shall the Company be liable to the client with respect to the Test Results except for the Company's own willful misconduct or gross negligence nor shall the Company be liable for incidental or consequential damages or lost profits or revenues to the fullest extent such liability may be disclaimed by law, even if the Company has been advised of the possibility of such damages, lost profits or lost revenues. In no event shall the Company's liability with respect to the Test Results exceed the amount paid to the Company by the client therefor.

Eurofins EPK Built Environment Testing, LLC's LabServe® reporting system includes automated fail-safes to ensure that all AIHA-LAP, LLC quality requirements are met and notifications are added to reports when any quality steps remain pending.

Eurofins EPK Built Environment Testing, LLC

2841 Dow Avenue, Suite 300, Tustin, CA 92780

(866) 888-6653 www.eurofinsus.com/Built

Client: Terracon Consultants, Inc. - Tustin, CA

C/O: Denise Wallen

Re: NA227079; LUSD Lakewood Elem School Pre-
reno HazMat Survey- 1100 N Ham Lane, Lodi

Date of Sampling: 10-05-2022

Date of Receipt: 10-10-2022

Date of Report: 10-17-2022

LEAD: FLAME ATOMIC ABSORPTION SPECTROMETRY

Location:	Pb-D-01: White, DW, wall, D109 by north door	Pb-D-02: Beige, wood, roof wall, east division wall	Pb-D-03: White, metal, window, D109 south exterior window
Comments (see below)	None	None	None
Lab ID-Version‡:	14723181-1	14723182-1	14723183-1
Analysis Date:	10/12/2022	10/12/2022	10/17/2022
Sample type	Paint Chip sample	Paint Chip sample	Paint Chip sample
Method*	NIOSH 7082 & EPA 7000B modified	NIOSH 7082 & EPA 7000B modified	NIOSH 7082 & EPA 7000B modified
† Method Reporting Limit	39 ppm	39 ppm	40 ppm
Sample size	0.2562 grams	0.2541 grams	0.2515 grams
§Total Lead Result	< 39 ppm	< 39 ppm	6200 ppm

Comments:

Sample results have not been corrected for blank values.

Bulk samples are not covered under the AIHA-LAP, LLC service accreditation.

Wipe samples must meet ASTM E1792 criteria. Method Reporting Limits may not be valid for non-ASTM E1792 wipe samples.

*Sample preparation and analytical methods are based upon NIOSH 7082 and EPA 7000B.

† The Method Reporting Limit is the minimum concentration of Lead that the laboratory can confidently detect in the sample.

§ Total Lead Result has been rounded to two significant figures to reflect analytical precision.

‡ A "Version" indicated by "-x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".



003052683

1220 Concord Avenue, Suite 450

Concord, CA 94520

P (925) 609-7224

Terracon.com

E-MAIL REPORT TO:		<input checked="" type="checkbox"/> tony.mikacich@terracon.com Project Manager		Lead in Paint & Bulk Samples FLAME AA Analysis / TTLC EMLabPK TAT: 3-5 days	
		<input checked="" type="checkbox"/> denise.wallin@terracon.com Project Assistant			
Project #:	NA227079	Project Address:	1100 N Ham Lane, Lodi	Sampling Date:	10/05/2022 – 10/07/2022
Project Name:	LUSD Lakewood Elem School Pre-reno HazMat Survey			Sampled By:	J. Alexander & W. Renner
Building Name / Area:			Building D	Page 1 of 1	

Sample #	Color:	Paint or Bulk	Size of Ceramic	Substrate	Component	Location	Condition (I/F/P)
Examples:		P or B	ie. 4"x4"	DW / Metal / Concrete / Stucco	Wall / Door / Frame / Sill		
Pb-D-01	white	D	—	DW	Wall	Dlog by north door	I
Pb-D-02	Beige	P	—	wall	roof wall	East dinner wall	I
Pb-D-03	white	B	—	metal	window	Dlog south exterior side	I
Pb-							
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Relinquished By: Wyatt Renner

Signature:

Date/Time: 10/7/22

Received By: ANDREW ARSTFELT

Signature:

Date/Time: 10/10/22 9:30A

Relinquished By: _____

Signature: _____

Date/Time: _____

Received By: _____

Signature: _____

Date/Time: _____

Report for:

Denise Wallen
Terracon Consultants, Inc. - Tustin, CA
23041 Avenida De La Carlota
Suite 350
Laguna Hills, CA 92653

Regarding: Eurofins EPK Built Environment Testing, LLC
Project: NA227079; LUSD Lakewood Elem School Pre-reno HazMat Survey
EML ID: 3052675

Approved by:



Laboratory Manager
Danny Li

Dates of Analysis:

Lead - Flame AA: 10-12-2022 and 10-17-2022

Service SOPs: Lead - Flame AA (EM-BC-S-8443)
AIHA-LAP, LLC accredited service, Lab ID #178697

All samples were received in acceptable condition unless noted in the Report Comments portion in the body of the report. Due to the nature of the analyses performed, field blank correction of results is not applied. The results relate only to the samples as received and tested. Sample size, as it relates to Wipe samples only, is supplied by the client.

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Eurofins EPK Built Environment Testing, LLC

2841 Dow Avenue, Suite 300, Tustin, CA 92780

(866) 888-6653 www.eurofinsus.com/Built

Client: Terracon Consultants, Inc. - Tustin, CA

C/O: Denise Wallen

Re: NA227079; LUSD Lakewood Elem School Pre-
reno HazMat Survey

Date of Sampling: 10-05-2022

Date of Receipt: 10-10-2022

Date of Report: 10-17-2022

LEAD: FLAME ATOMIC ABSORPTION SPECTROMETRY

Location:	Pb-E-01: White, Metal, Window Caulk, SW Exterior by Drinking Fountain	Pb-E-02: White, Wallpaper/DW, Wall, E101 South Wall
Comments (see below)	None	None
Lab ID-Version‡:	14725555-1	14725556-1
Analysis Date:	10/17/2022	10/12/2022
Sample type	Bulk sample	Paint Chip sample
Method*	NIOSH 7082 & EPA 7000B modified	NIOSH 7082 & EPA 7000B modified
† Method Reporting Limit	39 ppm	39 ppm
Sample size	0.2541 grams	0.2562 grams
§ Total Lead Result	440 ppm	540 ppm

Comments:

Sample results have not been corrected for blank values.

Bulk samples are not covered under the AIHA-LAP, LLC service accreditation.

Wipe samples must meet ASTM E1792 criteria. Method Reporting Limits may not be valid for non-ASTM E1792 wipe samples.

*Sample preparation and analytical methods are based upon NIOSH 7082 and EPA 7000B.

† The Method Reporting Limit is the minimum concentration of Lead that the laboratory can confidently detect in the sample.

§ Total Lead Result has been rounded to two significant figures to reflect analytical precision.

‡ A "Version" indicated by -"x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".



003052675

1220 Concord Avenue, Suite 450

Concord, CA 94520

P (925) 609-7224

Terracon.com

E-MAIL REPORT TO:		<input checked="" type="checkbox"/> tony.mikacich@terracon.com Project Manager		Lead in Paint & Bulk Samples FLAME AA Analysis / TTLC EMLabPK TAT: 3-5 days	
		<input checked="" type="checkbox"/> denise.wallen@terracon.com Project Assistant			
Project #:	NA227079	Project Address:	1100 N Ham Lane, Lodi	Sampling Date:	10/05/2022 – 10/07/2022
Project Name:	LUSD Lakewood Elem School Pre-reno HazMat Survey			Sampled By:	J. Alexander & W. Renner
Building Name / Area:			Building E	Page 1 of 1	

Sample #	Color:	Paint or Bulk	Size of Ceramic	Substrate	Component	Location	Condition (I/F/P)
Examples:		P or B	ie. 4"x4"	DW / Metal / Concrete / Stucco	Wall / Door / Frame / Sill		
Pb-E-01	white	B	—	metal	window casing	SW exterior by drinking fountain	I
Pb-E-02	white	P	—	wallpaper/DW	wall	E101 South wall	I
Pb-							
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Relinquished By:

Wyatt Renner

Signature:

Date/Time:

10/7/22

Received By:

ANDREW ARETEGUI

Signature:

Date/Time:

10/10/22 9:30am

Relinquished By:

Signature:

Date/Time:

Received By:

Signature:

Date/Time:

APPENDIX D

PCB ANALYTICAL LABORATORY DATA



McC Campbell Analytical, Inc.

"When Quality Counts"

Analytical Report

WorkOrder: 2210439

Report Created for: Terracon

1220 Concord Avenue, Suite 450
Concord, CA 94520

Project Contact: Denise Wallen

Project P.O.:

Project: NA227079; LUSD Lakewood Elem School Pre-reno
HazMat Survey

Project Received: 10/07/2022

Analytical Report reviewed & approved for release on 10/14/2022 by:

Yen Cao
Project Manager

The report shall not be reproduced except in full, without the written approval of the laboratory. The analytical results relate only to the items tested. Results reported conform to the most current NELAP standards, where applicable, unless otherwise stated in a case narrative.





Glossary of Terms & Qualifier Definitions

Client: Terracon

WorkOrder: 2210439

Project: NA227079; LUSD Lakewood Elem School Pre-reno HazMat Survey

Glossary Abbreviation

%D	Serial Dilution Percent Difference
95% Interval	95% Confident Interval
CPT	Consumer Product Testing not NELAP Accredited
DF	Dilution Factor
DI WET	(DISTLC) Waste Extraction Test using DI water
DISS	Dissolved (direct analysis of 0.45 µm filtered and acidified water sample)
DLT	Dilution Test (Serial Dilution)
DUP	Duplicate
EDL	Estimated Detection Limit
ERS	External reference sample. Second source calibration verification.
ITEF	International Toxicity Equivalence Factor
LCS	Laboratory Control Sample
LQL	Lowest Quantitation Level
MB	Method Blank
MB % Rec	% Recovery of Surrogate in Method Blank, if applicable
MDL	MDL is the minimum measured concentration of a substance that can be reported with 99% confidence that the measured concentration is distinguishable from method blank results. Definition and Procedure for the Determination of the Method Detection Limit, Revision 2, 40CFR, Part 136, Appendix B, EPA 821-R-16-006, December 2016.
ML	Minimum Level of Quantitation
MS	Matrix Spike
MSD	Matrix Spike Duplicate
NA	Not Applicable
ND	Not detected at or above the indicated MDL or RL
NR	Data Not Reported due to matrix interference or insufficient sample amount.
PDS	Post Digestion Spike
PDSD	Post Digestion Spike Duplicate
PF	Prep Factor
RD	Relative Difference
RL	Reporting limit is the lowest level that can be reliably determined within specified limits of precision and accuracy during routine laboratory operating conditions. (The RL cannot be lower than the lowest calibration standard used in the initial calibration of the instrument and must be greater than the MDL.)
RPD	Relative Percent Deviation
RRT	Relative Retention Time
SPK Val	Spike Value
SPKRef Val	Spike Reference Value
SPLP	Synthetic Precipitation Leachate Procedure
ST	Sorbent Tube
TCLP	Toxicity Characteristic Leachate Procedure
TEQ	Toxicity Equivalents
TZA	TimeZone Net Adjustment for sample collected outside of MAI's UTC.
WET (STLC)	Waste Extraction Test (Soluble Threshold Limit Concentration)



Glossary of Terms & Qualifier Definitions

Client: Terracon

WorkOrder: 2210439

Project: NA227079; LUSD Lakewood Elem School Pre-reno HazMat Survey

Analytical Qualifiers

a3	Sample diluted due to high organic content interfering with quantitative/or qualitative analysis.
a4	Reporting limits raised due to the sample's matrix prohibiting a full volume extraction.
h4	Sulfuric acid permanganate (EPA 3665) cleanup.



Analytical Report

Client: Terracon
Date Received: 10/07/2022 14:00
Date Prepared: 10/07/2022
Project: NA227079; LUSD Lakewood Elem School Pre-reno
HazMat Survey

WorkOrder: 2210439
Extraction Method: SW3550B/3630C
Analytical Method: SW8082
Unit: mg/kg

Polychlorinated Biphenyls (PCBs) Aroclors w/ Column Style Clean-up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
PCB-A-01	2210439-001A	Caulk	10/07/2022	GC40 10112230.d	255729

Analytes	Result	RL	DF	Date Analyzed
Aroclor1016	ND	1.0	20	10/11/2022 18:10
Aroclor1221	ND	1.0	20	10/11/2022 18:10
Aroclor1232	ND	1.0	20	10/11/2022 18:10
Aroclor1242	ND	1.0	20	10/11/2022 18:10
Aroclor1248	ND	1.0	20	10/11/2022 18:10
Aroclor1254	ND	1.0	20	10/11/2022 18:10
Aroclor1260	ND	1.0	20	10/11/2022 18:10
PCBs, total	ND	1.0	20	10/11/2022 18:10

Surrogates	REC (%)	Limits	
Decachlorobiphenyl	93	70-130	10/11/2022 18:10
Analyst(s): CN		Analytical Comments: a3	

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
PCB-A-02	2210439-002A	Caulk	10/07/2022	GC22 10112248.D	255729

Analytes	Result	RL	DF	Date Analyzed
Aroclor1016	ND	10	20	10/11/2022 22:58
Aroclor1221	ND	10	20	10/11/2022 22:58
Aroclor1232	ND	10	20	10/11/2022 22:58
Aroclor1242	ND	10	20	10/11/2022 22:58
Aroclor1248	ND	10	20	10/11/2022 22:58
Aroclor1254	ND	10	20	10/11/2022 22:58
Aroclor1260	ND	10	20	10/11/2022 22:58
PCBs, total	ND	10	20	10/11/2022 22:58

Surrogates	REC (%)	Limits	
Decachlorobiphenyl	95	70-130	10/11/2022 22:58
Analyst(s): CK		Analytical Comments: a4,h4	



Quality Control Report

Client: Terracon
Date Prepared: 10/07/2022
Date Analyzed: 10/11/2022
Instrument: GC20, GC40
Matrix: Caulk
Project: NA227079; LUSD Lakewood Elem School Pre-reno
HazMat Survey

WorkOrder: 2210439
BatchID: 255729
Extraction Method: SW3550B/3630C
Analytical Method: SW8082
Unit: mg/kg
Sample ID: MB/LCS/LCSD-255729

QC Summary Report for SW8082 w/ Column Clean-up

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Aroclor1016	ND	0.050	0.050	-	-	-
Aroclor1221	ND	0.050	0.050	-	-	-
Aroclor1232	ND	0.050	0.050	-	-	-
Aroclor1242	ND	0.050	0.050	-	-	-
Aroclor1248	ND	0.050	0.050	-	-	-
Aroclor1254	ND	0.050	0.050	-	-	-
Aroclor1260	ND	0.050	0.050	-	-	-

Surrogate Recovery

Decachlorobiphenyl	0.042			0.05	83	70-130
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Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Aroclor1016	0.14	0.14	0.15	94	96	70-130	2.89	20
Aroclor1260	0.14	0.15	0.15	96	101	70-130	5.06	20

Surrogate Recovery

Decachlorobiphenyl	0.047	0.050	0.050	95	101	70-130	6.02	20
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1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 2210439

ClientCode: RGAE

☐ WaterTrax

☐ CLIP

☐ EDF

☐ EQuIS

☐ Dry-Weight

☒ Email

☐ HardCopy

☐ ThirdParty

☐ J-flag

☐ Detection Summary

☐ Excel

Report to:

Denise Wallen
Terracon
1220 Concord Avenue, Suite 450
Concord, CA 94520
(510) 547-7771 FAX: (510) 547-1983

Email: Denise.wallen@terracon.com
cc/3rd Party: tony.mikacich@terracon.com;
PO:
Project: NA227079; LUSD Lakewood Elem School
Pre-reno HazMat Survey

Bill to:

Paul King
Terracon
1220 Concord Avenue, Suite 450
Concord, CA 94520
apinvoices@terracon.com

Requested TAT: 5 days;

Date Received: 10/07/2022

Date Logged: 10/07/2022

Lab ID	ClientSampleID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					1	2	3	4	5	6	7	8	9	10	11	12
2210439-001	PCB-A-01	Caulk	10/7/2022 00:00	<input type="checkbox"/>	A	A										
2210439-002	PCB-A-02	Caulk	10/7/2022 00:00	<input type="checkbox"/>	A	A										

Test Legend:

1	8082_PCB_SG_Caulk
5	
9	

2	PRDisposal Fee
6	
10	

3	
7	
11	

4	
8	
12	

Prepared by: Halle Williams

Comments:

NOTE: Soil samples are discarded 60 days after receipt unless other arrangements are made (Water samples are 30 days).
Hazardous samples will be returned to client or disposed of at client expense.



WORK ORDER SUMMARY

Client Name: TERRACON
Client Contact: Denise Wallen
Contact's Email: Denise.wallan@terracon.com

Project: NA227079; LUSD Lakewood Elem School Pre-reno
HazMat Survey

Comments:

Work Order: 2210439
QC Level: LEVEL 2
Date Logged: 10/7/2022

☐ WaterTrax ☐ WriteOn ☐ EDF ☐ Excel ☐ EQUIS ☒ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

LabID	ClientSampID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	U**	Head Space	Dry- Weight	Collection Date & Time	TAT	Test Due Date	Sediment Content	Hold	Sub Out
001A	PCB-A-01	Caulk	SW8082 (PCBs w/ Column Style Clean-up)	1	Plastic Baggie, Extra Small	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	10/7/2022	5 days	10/17/2022		<input type="checkbox"/>	<input type="checkbox"/>
002A	PCB-A-02	Caulk	SW8082 (PCBs w/ Column Style Clean-up)	1	Plastic Baggie, Extra Small	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	10/7/2022	5 days	10/17/2022		<input type="checkbox"/>	<input type="checkbox"/>

NOTES: * STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).

- Organic extracts are held for 40 days before disposal; Inorganic extract are held for 30 days.

- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.

U** = An unpreserved container was received for a method that suggests a preservation in order to extend hold time for analysis.



E-MAIL REPORT TO:		<input checked="" type="checkbox"/> tony.mikacich@terracon.com Project Manager		PCB Bulk Samples	
		<input checked="" type="checkbox"/> denise.wallén@terracon.com Project Assistant		EPA 8082/8082A AROCLORS ONLY	
				Reporting Limit: 50 PPM Minimum	
				McC Campbell TAT: 3-5 days	
Project #:	NA227079	Project Address:	1100 N Ham Lane, Lodi	Sampling Date:	10/05/2022 – 10/07/2022
Project Name:	LUSD Lakewood Elem School Pre-reno HazMat Survey			Sampled By:	J. Alexander & W. Renner
Building Name / Area:		Building A		Page 1 of 1	

PCB-A-01	Material Description: Black Sealant	
Sample ID	Sample Location & Material Location	Quantity:
PCB-A-01	NW exterior corner	150 in. ft
PCB-A-02	Material Description: black window gasket	
Sample ID	Sample Location & Material Location	Quantity:
PCB-A-02	NE exterior	500 sq. ft
	Material Description:	
Sample ID	Sample Location & Material Location	Quantity:
PCB -		
	Material Description:	
Sample ID	Sample Location & Material Location	Quantity:
PCB -		
	Material Description:	
Sample ID	Sample Location & Material Location	Quantity:
PCB -		

Relinquished By:

Received By:

Relinquished By:

Received By:

Signature:

Signature:

Signature:

Signature:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

12.90 WET



Sample Receipt Checklist

Client Name: Terracon
Project: NA227079; LUSD Lakewood Elem School Pre-reno HazMat Survey
WorkOrder No: 2210439 Matrix: Caulk
Carrier: Client Drop-In

Date and Time Received: 10/7/2022 14:00
Date Logged: 10/7/2022
Received by: Agustina Venegas
Logged by: Halle Williams

Chain of Custody (COC) Information

Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample IDs noted by Client on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Date and Time of collection noted by Client on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sampler's name noted on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
COC agrees with Quote?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>

Sample Receipt Information

Custody seals intact on shipping container/cooler?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	NA <input type="checkbox"/>
Custody seals intact on sample bottles?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	NA <input type="checkbox"/>
Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper containers/bottles?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	NA <input type="checkbox"/>
Samples Received on Ice?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	

(Ice Type: WET ICE)

Sample/Temp Blank temperature	Temp: 12.9°C	NA <input type="checkbox"/>
ZHS conditional analyses: VOA meets zero headspace requirement (VOCs, TPHg/BTEX, RSK)?	Yes <input type="checkbox"/> No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>
Sample labels checked for correct preservation?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
pH acceptable upon receipt (Metal: <2; Nitrate 353.2/4500NO3: <2; 522: <4; 218.7: >8)?	Yes <input type="checkbox"/> No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>

UCMR Samples:

pH tested and acceptable upon receipt (200.7: ≤2; 533: 6 - 8; 537.1: 6 - 8)?	Yes <input type="checkbox"/> No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>
Free Chlorine tested and acceptable upon receipt (<0.1mg/L) [not applicable to 200.7]?	Yes <input type="checkbox"/> No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>

Comments:



McC Campbell Analytical, Inc.

"When Quality Counts"

Analytical Report

WorkOrder: 2210443

Report Created for: Terracon

1220 Concord Avenue, Suite 450
Concord, CA 94520

Project Contact: Denise Wallen

Project P.O.:

Project: NA227079; LUSD Lakewood Elem School Pre-reno
HazMat Survey

Project Received: 10/07/2022

Analytical Report reviewed & approved for release on 10/14/2022 by:

Yen Cao
Project Manager

The report shall not be reproduced except in full, without the written approval of the laboratory. The analytical results relate only to the items tested. Results reported conform to the most current NELAP standards, where applicable, unless otherwise stated in a case narrative.





Glossary of Terms & Qualifier Definitions

Client: Terracon

WorkOrder: 2210443

Project: NA227079; LUSD Lakewood Elem School Pre-reno HazMat Survey

Glossary Abbreviation

%D	Serial Dilution Percent Difference
95% Interval	95% Confident Interval
CPT	Consumer Product Testing not NELAP Accredited
DF	Dilution Factor
DI WET	(DISTLC) Waste Extraction Test using DI water
DISS	Dissolved (direct analysis of 0.45 µm filtered and acidified water sample)
DLT	Dilution Test (Serial Dilution)
DUP	Duplicate
EDL	Estimated Detection Limit
ERS	External reference sample. Second source calibration verification.
ITEF	International Toxicity Equivalence Factor
LCS	Laboratory Control Sample
LQL	Lowest Quantitation Level
MB	Method Blank
MB % Rec	% Recovery of Surrogate in Method Blank, if applicable
MDL	MDL is the minimum measured concentration of a substance that can be reported with 99% confidence that the measured concentration is distinguishable from method blank results. Definition and Procedure for the Determination of the Method Detection Limit, Revision 2, 40CFR, Part 136, Appendix B, EPA 821-R-16-006, December 2016.
ML	Minimum Level of Quantitation
MS	Matrix Spike
MSD	Matrix Spike Duplicate
NA	Not Applicable
ND	Not detected at or above the indicated MDL or RL
NR	Data Not Reported due to matrix interference or insufficient sample amount.
PDS	Post Digestion Spike
PDSD	Post Digestion Spike Duplicate
PF	Prep Factor
RD	Relative Difference
RL	Reporting limit is the lowest level that can be reliably determined within specified limits of precision and accuracy during routine laboratory operating conditions. (The RL cannot be lower than the lowest calibration standard used in the initial calibration of the instrument and must be greater than the MDL.)
RPD	Relative Percent Deviation
RRT	Relative Retention Time
SPK Val	Spike Value
SPKRef Val	Spike Reference Value
SPLP	Synthetic Precipitation Leachate Procedure
ST	Sorbent Tube
TCLP	Toxicity Characteristic Leachate Procedure
TEQ	Toxicity Equivalents
TZA	TimeZone Net Adjustment for sample collected outside of MAI's UTC.
WET (STLC)	Waste Extraction Test (Soluble Threshold Limit Concentration)



Glossary of Terms & Qualifier Definitions

Client: Terracon

WorkOrder: 2210443

Project: NA227079; LUSD Lakewood Elem School Pre-reno HazMat Survey

Analytical Qualifiers

a4	Reporting limits raised due to the sample's matrix prohibiting a full volume extraction.
h4	Sulfuric acid permanganate (EPA 3665) cleanup.



Analytical Report

Client: Terracon
Date Received: 10/07/2022 14:00
Date Prepared: 10/07/2022
Project: NA227079; LUSD Lakewood Elem School Pre-reno
HazMat Survey

WorkOrder: 2210443
Extraction Method: SW3550B/3630C
Analytical Method: SW8082
Unit: mg/kg

Polychlorinated Biphenyls (PCBs) Aroclors w/ Column Style Clean-up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
PCB-B-01	2210443-001A	Caulk	10/07/2022	GC22 10112253.D	255729

Analytes	Result	RL	DF	Date Analyzed
Aroclor1016	ND	10	20	10/12/2022 00:19
Aroclor1221	ND	10	20	10/12/2022 00:19
Aroclor1232	ND	10	20	10/12/2022 00:19
Aroclor1242	ND	10	20	10/12/2022 00:19
Aroclor1248	ND	10	20	10/12/2022 00:19
Aroclor1254	ND	10	20	10/12/2022 00:19
Aroclor1260	ND	10	20	10/12/2022 00:19
PCBs, total	ND	10	20	10/12/2022 00:19

Surrogates	REC (%)	Limits	
Decachlorobiphenyl	86	70-130	10/12/2022 00:19

Analyst(s): CK

Analytical Comments: a4,h4

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
PCB-B-02	2210443-002A	Caulk	10/07/2022	GC22 10112251.D	255729

Analytes	Result	RL	DF	Date Analyzed
Aroclor1016	ND	10	20	10/11/2022 23:46
Aroclor1221	ND	10	20	10/11/2022 23:46
Aroclor1232	ND	10	20	10/11/2022 23:46
Aroclor1242	ND	10	20	10/11/2022 23:46
Aroclor1248	ND	10	20	10/11/2022 23:46
Aroclor1254	ND	10	20	10/11/2022 23:46
Aroclor1260	ND	10	20	10/11/2022 23:46
PCBs, total	ND	10	20	10/11/2022 23:46

Surrogates	REC (%)	Limits	
Decachlorobiphenyl	106	70-130	10/11/2022 23:46

Analyst(s): CK

Analytical Comments: a4,h4



Quality Control Report

Client: Terracon
Date Prepared: 10/07/2022
Date Analyzed: 10/11/2022
Instrument: GC20, GC40
Matrix: Caulk
Project: NA227079; LUSD Lakewood Elem School Pre-reno
HazMat Survey

WorkOrder: 2210443
BatchID: 255729
Extraction Method: SW3550B/3630C
Analytical Method: SW8082
Unit: mg/kg
Sample ID: MB/LCS/LCSD-255729

QC Summary Report for SW8082 w/ Column Clean-up

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Aroclor1016	ND	0.050	0.050	-	-	-
Aroclor1221	ND	0.050	0.050	-	-	-
Aroclor1232	ND	0.050	0.050	-	-	-
Aroclor1242	ND	0.050	0.050	-	-	-
Aroclor1248	ND	0.050	0.050	-	-	-
Aroclor1254	ND	0.050	0.050	-	-	-
Aroclor1260	ND	0.050	0.050	-	-	-

Surrogate Recovery

Decachlorobiphenyl	0.042			0.05	83	70-130
--------------------	-------	--	--	------	----	--------

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Aroclor1016	0.14	0.14	0.15	94	96	70-130	2.89	20
Aroclor1260	0.14	0.15	0.15	96	101	70-130	5.06	20

Surrogate Recovery

Decachlorobiphenyl	0.047	0.050	0.050	95	101	70-130	6.02	20
--------------------	-------	-------	-------	----	-----	--------	------	----



1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

☐ WaterTrax

☐ CLIP

☐ EDF

CHAIN-OF-CUSTODY RECORD

WorkOrder: 2210443

ClientCode: RGAE

☐ EQuIS

☐ Dry-Weight

☒ Email

☐ HardCopy

☐ ThirdParty

☐ J-flag

☐ Detection Summary

☐ Excel

Report to:

Denise Wallen
Terracon
1220 Concord Avenue, Suite 450
Concord, CA 94520
(510) 547-7771 FAX: (510) 547-1983

Email: Denise.wallen@terracon.com
cc/3rd Party: tony.mikacich@terracon.com;
PO:
Project: NA227079; LUSD Lakewood Elem School
Pre-reno HazMat Survey

Bill to:

Paul King
Terracon
1220 Concord Avenue, Suite 450
Concord, CA 94520
apinvoices@terracon.com

Requested TAT: 5 days;

Date Received: 10/07/2022

Date Logged: 10/07/2022

Lab ID	ClientSampleID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					1	2	3	4	5	6	7	8	9	10	11	12
2210443-001	PCB-B-01	Caulk	10/7/2022 00:00	<input type="checkbox"/>	A	A										
2210443-002	PCB-B-02	Caulk	10/7/2022 00:00	<input type="checkbox"/>	A	A										

Test Legend:

1	8082_PCB_SG_Caulk
5	
9	

2	PRDisposal Fee
6	
10	

3	
7	
11	

4	
8	
12	

Prepared by: Halle Williams

Comments:

NOTE: Soil samples are discarded 60 days after receipt unless other arrangements are made (Water samples are 30 days).
Hazardous samples will be returned to client or disposed of at client expense.



WORK ORDER SUMMARY

Client Name: TERRACON
Client Contact: Denise Wallen
Contact's Email: Denise.wallen@terracon.com

Project: NA227079; LUSD Lakewood Elem School Pre-reno
HazMat Survey

Comments:

Work Order: 2210443
QC Level: LEVEL 2
Date Logged: 10/7/2022

☐ WaterTrax ☐ WriteOn ☐ EDF ☐ Excel ☐ EQUIS ☒ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

LabID	ClientSampID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	U**	Head Space	Dry- Weight	Collection Date & Time	TAT	Test Due Date	Sediment Content	Hold	Sub Out
001A	PCB-B-01	Caulk	SW8082 (PCBs w/ Column Style Clean-up)	1	Plastic Baggie, Extra Small	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	10/7/2022	5 days	10/17/2022		<input type="checkbox"/>	<input type="checkbox"/>
002A	PCB-B-02	Caulk	SW8082 (PCBs w/ Column Style Clean-up)	1	Plastic Baggie, Extra Small	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	10/7/2022	5 days	10/17/2022		<input type="checkbox"/>	<input type="checkbox"/>

NOTES: * STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).

- Organic extracts are held for 40 days before disposal; Inorganic extract are held for 30 days.

- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.

U** = An unpreserved container was received for a method that suggests a preservation in order to extend hold time for analysis.



E-MAIL REPORT TO:		<input checked="" type="checkbox"/> tony.mikacich@terracon.com Project Manager		PCB Bulk Samples	
		<input checked="" type="checkbox"/> denise.wallén@terracon.com Project Assistant		EPA 8082/8082A AROCLORS ONLY	
				Reporting Limit: 50 PPM Minimum	
				McC Campbell TAT: 3-5 days	
Project #:	NA227079	Project Address:	1100 N Ham Lane, Lodi	Sampling Date:	10/05/2022 – 10/07/2022
Project Name:	LUSD Lakewood Elem School Pre-reno HazMat Survey			Sampled By:	J. Alexander & W. Renner
Building Name / Area:		Building B		Page ____ of ____	

PCB-B-01	Material Description: Black window gasket	
Sample ID	Sample Location & Material Location	Quantity:
PCB-B-01	B103 exterior window	600 sq. ft.
PCB-B-02	Material Description: Black Sealant	
Sample ID	Sample Location & Material Location	Quantity:
PCB-B-02	South exterior west side	152 ln. ft.
	Material Description:	
Sample ID	Sample Location & Material Location	Quantity:
PCB -		
	Material Description:	
Sample ID	Sample Location & Material Location	Quantity:
PCB -		
	Material Description:	
Sample ID	Sample Location & Material Location	Quantity:
PCB -		

Relinquished By:

Received By:

Relinquished By:

Received By:

Signature:

Signature:

Signature:

Signature:

Date/Time:

Date/Time:

Date/Time:

Date/Time:

12.90
v12.90



Sample Receipt Checklist

Client Name: Terracon
Project: NA227079; LUSD Lakewood Elem School Pre-reno HazMat Survey
WorkOrder No: 2210443 Matrix: Caulk
Carrier: Client Drop-In
Date and Time Received: 10/7/2022 14:00
Date Logged: 10/7/2022
Received by: Agustina Venegas
Logged by: Halle Williams

Chain of Custody (COC) Information

Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample IDs noted by Client on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Date and Time of collection noted by Client on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sampler's name noted on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
COC agrees with Quote?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>

Sample Receipt Information

Custody seals intact on shipping container/cooler?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	NA <input type="checkbox"/>
Custody seals intact on sample bottles?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	NA <input type="checkbox"/>
Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper containers/bottles?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	NA <input type="checkbox"/>
Samples Received on Ice?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	

(Ice Type: WET ICE)

Sample/Temp Blank temperature	Temp: 12.9°C	NA <input type="checkbox"/>
ZHS conditional analyses: VOA meets zero headspace requirement (VOCs, TPHg/BTEX, RSK)?	Yes <input type="checkbox"/> No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>
Sample labels checked for correct preservation?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
pH acceptable upon receipt (Metal: <2; Nitrate 353.2/4500NO3: <2; 522: <4; 218.7: >8)?	Yes <input type="checkbox"/> No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>

UCMR Samples:

pH tested and acceptable upon receipt (200.7: ≤2; 533: 6 - 8; 537.1: 6 - 8)?	Yes <input type="checkbox"/> No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>
Free Chlorine tested and acceptable upon receipt (<0.1mg/L) [not applicable to 200.7]?	Yes <input type="checkbox"/> No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>

Comments:



McC Campbell Analytical, Inc.

"When Quality Counts"

Analytical Report

WorkOrder: 2210447

Report Created for: Terracon

1220 Concord Avenue, Suite 450
Concord, CA 94520

Project Contact: Denise Wallen

Project P.O.:

Project: NA227079; LUSD Lakewood Elem School Pre-reno
HazMat Survey

Project Received: 10/07/2022

Analytical Report reviewed & approved for release on 10/14/2022 by:

Yen Cao
Project Manager

The report shall not be reproduced except in full, without the written approval of the laboratory. The analytical results relate only to the items tested. Results reported conform to the most current NELAP standards, where applicable, unless otherwise stated in a case narrative.





Glossary of Terms & Qualifier Definitions

Client: Terracon

WorkOrder: 2210447

Project: NA227079; LUSD Lakewood Elem School Pre-reno HazMat Survey

Glossary Abbreviation

%D	Serial Dilution Percent Difference
95% Interval	95% Confident Interval
CPT	Consumer Product Testing not NELAP Accredited
DF	Dilution Factor
DI WET	(DISTLC) Waste Extraction Test using DI water
DISS	Dissolved (direct analysis of 0.45 µm filtered and acidified water sample)
DLT	Dilution Test (Serial Dilution)
DUP	Duplicate
EDL	Estimated Detection Limit
ERS	External reference sample. Second source calibration verification.
ITEF	International Toxicity Equivalence Factor
LCS	Laboratory Control Sample
LQL	Lowest Quantitation Level
MB	Method Blank
MB % Rec	% Recovery of Surrogate in Method Blank, if applicable
MDL	MDL is the minimum measured concentration of a substance that can be reported with 99% confidence that the measured concentration is distinguishable from method blank results. Definition and Procedure for the Determination of the Method Detection Limit, Revision 2, 40CFR, Part 136, Appendix B, EPA 821-R-16-006, December 2016.
ML	Minimum Level of Quantitation
MS	Matrix Spike
MSD	Matrix Spike Duplicate
NA	Not Applicable
ND	Not detected at or above the indicated MDL or RL
NR	Data Not Reported due to matrix interference or insufficient sample amount.
PDS	Post Digestion Spike
PDSD	Post Digestion Spike Duplicate
PF	Prep Factor
RD	Relative Difference
RL	Reporting limit is the lowest level that can be reliably determined within specified limits of precision and accuracy during routine laboratory operating conditions. (The RL cannot be lower than the lowest calibration standard used in the initial calibration of the instrument and must be greater than the MDL.)
RPD	Relative Percent Deviation
RRT	Relative Retention Time
SPK Val	Spike Value
SPKRef Val	Spike Reference Value
SPLP	Synthetic Precipitation Leachate Procedure
ST	Sorbent Tube
TCLP	Toxicity Characteristic Leachate Procedure
TEQ	Toxicity Equivalents
TZA	TimeZone Net Adjustment for sample collected outside of MAI's UTC.
WET (STLC)	Waste Extraction Test (Soluble Threshold Limit Concentration)



Glossary of Terms & Qualifier Definitions

Client: Terracon

WorkOrder: 2210447

Project: NA227079; LUSD Lakewood Elem School Pre-reno HazMat Survey

Analytical Qualifiers

a3	Sample diluted due to high organic content interfering with quantitative/or qualitative analysis.
a4	Reporting limits raised due to the sample's matrix prohibiting a full volume extraction.
h4	Sulfuric acid permanganate (EPA 3665) cleanup.



Analytical Report

Client: Terracon
Date Received: 10/07/2022 14:00
Date Prepared: 10/07/2022
Project: NA227079; LUSD Lakewood Elem School Pre-reno
HazMat Survey

WorkOrder: 2210447
Extraction Method: SW3550B/3630C
Analytical Method: SW8082
Unit: mg/kg

Polychlorinated Biphenyls (PCBs) Aroclors w/ Column Style Clean-up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
PCB-C-01	2210447-001A	Caulk	10/07/2022	GC22 10112257.D	255729

Analytes	Result	RL	DF	Date Analyzed
Aroclor1016	ND	10	20	10/12/2022 01:23
Aroclor1221	ND	10	20	10/12/2022 01:23
Aroclor1232	ND	10	20	10/12/2022 01:23
Aroclor1242	ND	10	20	10/12/2022 01:23
Aroclor1248	ND	10	20	10/12/2022 01:23
Aroclor1254	ND	10	20	10/12/2022 01:23
Aroclor1260	ND	10	20	10/12/2022 01:23
PCBs, total	ND	10	20	10/12/2022 01:23

Surrogates	REC (%)	Limits	
Decachlorobiphenyl	108	70-130	10/12/2022 01:23
Analyst(s): CK		Analytical Comments: a3,h4	

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
PCB-C-02	2210447-002A	Caulk	10/07/2022	GC22 10112252.D	255729

Analytes	Result	RL	DF	Date Analyzed
Aroclor1016	ND	10	20	10/12/2022 00:03
Aroclor1221	ND	10	20	10/12/2022 00:03
Aroclor1232	ND	10	20	10/12/2022 00:03
Aroclor1242	ND	10	20	10/12/2022 00:03
Aroclor1248	ND	10	20	10/12/2022 00:03
Aroclor1254	ND	10	20	10/12/2022 00:03
Aroclor1260	ND	10	20	10/12/2022 00:03
PCBs, total	ND	10	20	10/12/2022 00:03

Surrogates	REC (%)	Limits	
Decachlorobiphenyl	95	70-130	10/12/2022 00:03
Analyst(s): CK		Analytical Comments: a4,h4	



Quality Control Report

Client: Terracon
Date Prepared: 10/07/2022
Date Analyzed: 10/11/2022
Instrument: GC20, GC40
Matrix: Caulk
Project: NA227079; LUSD Lakewood Elem School Pre-reno
HazMat Survey

WorkOrder: 2210447
BatchID: 255729
Extraction Method: SW3550B/3630C
Analytical Method: SW8082
Unit: mg/kg
Sample ID: MB/LCS/LCSD-255729

QC Summary Report for SW8082 w/ Column Clean-up

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Aroclor1016	ND	0.050	0.050	-	-	-
Aroclor1221	ND	0.050	0.050	-	-	-
Aroclor1232	ND	0.050	0.050	-	-	-
Aroclor1242	ND	0.050	0.050	-	-	-
Aroclor1248	ND	0.050	0.050	-	-	-
Aroclor1254	ND	0.050	0.050	-	-	-
Aroclor1260	ND	0.050	0.050	-	-	-

Surrogate Recovery

Decachlorobiphenyl	0.042			0.05	83	70-130
--------------------	-------	--	--	------	----	--------

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Aroclor1016	0.14	0.14	0.15	94	96	70-130	2.89	20
Aroclor1260	0.14	0.15	0.15	96	101	70-130	5.06	20

Surrogate Recovery

Decachlorobiphenyl	0.047	0.050	0.050	95	101	70-130	6.02	20
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1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

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CHAIN-OF-CUSTODY RECORD

Page 1 of 1

WorkOrder: 2210447

ClientCode: RGAE

☐ EQuIS☐ Dry-Weight☒ Email☐ HardCopy☐ ThirdParty☐ J-flag☐ Detection Summary☐ Excel

Report to:

Denise Wallen
Terracon
1220 Concord Avenue, Suite 450
Concord, CA 94520
(510) 547-7771 FAX: (510) 547-1983

Email: Denise.wallen@terracon.com
cc/3rd Party: tony.mikacich@terracon.com;
PO:
Project: NA227079; LUSD Lakewood Elem School
Pre-reno HazMat Survey

Bill to:

Paul King
Terracon
1220 Concord Avenue, Suite 450
Concord, CA 94520
apinvoices@terracon.com

Requested TAT: 5 days;

Date Received: 10/07/2022

Date Logged: 10/07/2022

Lab ID	ClientSampleID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					1	2	3	4	5	6	7	8	9	10	11	12
2210447-001	PCB-C-01	Caulk	10/7/2022 00:00	<input type="checkbox"/>	A	A										
2210447-002	PCB-C-02	Caulk	10/7/2022 00:00	<input type="checkbox"/>	A	A										

Test Legend:

1	8082_PCB_SG_Caulk
5	
9	

2	PRDisposal Fee
6	
10	

3	
7	
11	

4	
8	
12	

Prepared by: Halle Williams

Comments:

NOTE: Soil samples are discarded 60 days after receipt unless other arrangements are made (Water samples are 30 days).
Hazardous samples will be returned to client or disposed of at client expense.



WORK ORDER SUMMARY

Client Name: TERRACON
Client Contact: Denise Wallen
Contact's Email: Denise.wallan@terracon.com

Project: NA227079; LUSD Lakewood Elem School Pre-reno
HazMat Survey

Comments:

Work Order: 2210447
QC Level: LEVEL 2
Date Logged: 10/7/2022

☐ WaterTrax ☐ WriteOn ☐ EDF ☐ Excel ☐ EQUIS ☒ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

LabID	ClientSampID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	U**	Head Space	Dry- Weight	Collection Date & Time	TAT	Test Due Date	Sediment Content	Hold	Sub Out
001A	PCB-C-01	Caulk	SW8082 (PCBs w/ Column Style Clean-up)	1	Plastic Baggie, Extra Small	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	10/7/2022	5 days	10/17/2022		<input type="checkbox"/>	<input type="checkbox"/>
002A	PCB-C-02	Caulk	SW8082 (PCBs w/ Column Style Clean-up)	1	Plastic Baggie, Extra Small	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	10/7/2022	5 days	10/17/2022		<input type="checkbox"/>	<input type="checkbox"/>

NOTES: * STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).

- Organic extracts are held for 40 days before disposal; Inorganic extract are held for 30 days.

- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.

U** = An unpreserved container was received for a method that suggests a preservation in order to extend hold time for analysis.



2210447
1220 Concord Avenue, Suite 450
Concord, CA 94520
P (925) 609-7224
Terracon.com

E-MAIL REPORT TO:		<input checked="" type="checkbox"/> tony.mikacich@terracon.com Project Manager		PCB Bulk Samples	
		<input checked="" type="checkbox"/> denise.wallén@terracon.com Project Assistant		EPA 8082/8082A AROCLORS ONLY	
				Reporting Limit: 50 PPM Minimum	
				McC Campbell TAT: 3-5 days	
Project #:	NA227079	Project Address:	1100 N Ham Lane, Lodi	Sampling Date:	10/05/2022 – 10/07/2022
Project Name:	LUSD Lakewood Elem School Pre-reno HazMat Survey			Sampled By:	J. Alexander & W. Renner
Building Name / Area:		Building C		Page 1 of 1	

PCB-C-01	Material Description: Black window gasket	
Sample ID	Sample Location & Material Location	Quantity:
PCB-C-01	Close E windows	
PCB-C-02	Material Description: Black building Sealant	
Sample ID	Sample Location & Material Location	Quantity:
PCB-C-02	SW exterior corner	
	Material Description:	
Sample ID	Sample Location & Material Location	Quantity:
PCB -		
	Material Description:	
Sample ID	Sample Location & Material Location	Quantity:
PCB -		
	Material Description:	
Sample ID	Sample Location & Material Location	Quantity:
PCB -		

Relinquished By:
Received By:
Relinquished By:
Received By:

Wyatt Renner
Augustine

Signature:
Signature:
Signature:
Signature:

Date/Time:
Date/Time:
Date/Time:
Date/Time:

10/7/22
10/7/2022 1400



Sample Receipt Checklist

Client Name: Terracon
Project: NA227079; LUSD Lakewood Elem School Pre-reno HazMat Survey
WorkOrder No: 2210447 Matrix: Caulk
Carrier: Client Drop-In

Date and Time Received: 10/7/2022 14:00
Date Logged: 10/7/2022
Received by: Agustina Venegas
Logged by: Halle Williams

Chain of Custody (COC) Information

Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample IDs noted by Client on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Date and Time of collection noted by Client on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sampler's name noted on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
COC agrees with Quote?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>

Sample Receipt Information

Custody seals intact on shipping container/cooler?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	NA <input type="checkbox"/>
Custody seals intact on sample bottles?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	NA <input type="checkbox"/>
Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper containers/bottles?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	NA <input type="checkbox"/>
Samples Received on Ice?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	

(Ice Type: WET ICE)

Sample/Temp Blank temperature	Temp: 12.9°C	NA <input type="checkbox"/>
ZHS conditional analyses: VOA meets zero headspace requirement (VOCs, TPHg/BTEX, RSK)?	Yes <input type="checkbox"/> No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>
Sample labels checked for correct preservation?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
pH acceptable upon receipt (Metal: <2; Nitrate 353.2/4500NO3: <2; 522: <4; 218.7: >8)?	Yes <input type="checkbox"/> No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>

UCMR Samples:

pH tested and acceptable upon receipt (200.7: ≤2; 533: 6 - 8; 537.1: 6 - 8)?	Yes <input type="checkbox"/> No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>
Free Chlorine tested and acceptable upon receipt (<0.1mg/L) [not applicable to 200.7]?	Yes <input type="checkbox"/> No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>

Comments:



McC Campbell Analytical, Inc.

"When Quality Counts"

Analytical Report

WorkOrder: 2210404

Report Created for: Terracon

1220 Concord Avenue, Suite 450
Concord, CA 94520

Project Contact: Denise Wallen

Project P.O.:

Project: NA227079; LUSD Lakewood Elem School Pre-reno
HazMat Survey

Project Received: 10/07/2022

Analytical Report reviewed & approved for release on 10/14/2022 by:

Yen Cao
Project Manager

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Glossary of Terms & Qualifier Definitions

Client: Terracon

WorkOrder: 2210404

Project: NA227079; LUSD Lakewood Elem School Pre-reno HazMat Survey

Glossary Abbreviation

%D	Serial Dilution Percent Difference
95% Interval	95% Confident Interval
CPT	Consumer Product Testing not NELAP Accredited
DF	Dilution Factor
DI WET	(DISTLC) Waste Extraction Test using DI water
DISS	Dissolved (direct analysis of 0.45 µm filtered and acidified water sample)
DLT	Dilution Test (Serial Dilution)
DUP	Duplicate
EDL	Estimated Detection Limit
ERS	External reference sample. Second source calibration verification.
ITEF	International Toxicity Equivalence Factor
LCS	Laboratory Control Sample
LQL	Lowest Quantitation Level
MB	Method Blank
MB % Rec	% Recovery of Surrogate in Method Blank, if applicable
MDL	MDL is the minimum measured concentration of a substance that can be reported with 99% confidence that the measured concentration is distinguishable from method blank results. Definition and Procedure for the Determination of the Method Detection Limit, Revision 2, 40CFR, Part 136, Appendix B, EPA 821-R-16-006, December 2016.
ML	Minimum Level of Quantitation
MS	Matrix Spike
MSD	Matrix Spike Duplicate
NA	Not Applicable
ND	Not detected at or above the indicated MDL or RL
NR	Data Not Reported due to matrix interference or insufficient sample amount.
PDS	Post Digestion Spike
PDSD	Post Digestion Spike Duplicate
PF	Prep Factor
RD	Relative Difference
RL	Reporting limit is the lowest level that can be reliably determined within specified limits of precision and accuracy during routine laboratory operating conditions. (The RL cannot be lower than the lowest calibration standard used in the initial calibration of the instrument and must be greater than the MDL.)
RPD	Relative Percent Deviation
RRT	Relative Retention Time
SPK Val	Spike Value
SPKRef Val	Spike Reference Value
SPLP	Synthetic Precipitation Leachate Procedure
ST	Sorbent Tube
TCLP	Toxicity Characteristic Leachate Procedure
TEQ	Toxicity Equivalents
TZA	TimeZone Net Adjustment for sample collected outside of MAI's UTC.
WET (STLC)	Waste Extraction Test (Soluble Threshold Limit Concentration)



Glossary of Terms & Qualifier Definitions

Client: Terracon

WorkOrder: 2210404

Project: NA227079; LUSD Lakewood Elem School Pre-reno HazMat Survey

Analytical Qualifiers

a4	Reporting limits raised due to the sample's matrix prohibiting a full volume extraction.
h4	Sulfuric acid permanganate (EPA 3665) cleanup.



Analytical Report

Client: Terracon
Date Received: 10/07/2022 14:00
Date Prepared: 10/07/2022
Project: NA227079; LUSD Lakewood Elem School Pre-reno
HazMat Survey

WorkOrder: 2210404
Extraction Method: SW3550B/3630C
Analytical Method: SW8082
Unit: mg/kg

Polychlorinated Biphenyls (PCBs) Aroclors w/ Column Style Clean-up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
PCB-D-01	2210404-001A	Caulk	10/07/2022	GC22 10112249.D	255729

Analytes	Result	RL	DF	Date Analyzed
Aroclor1016	ND	10	20	10/11/2022 23:14
Aroclor1221	ND	10	20	10/11/2022 23:14
Aroclor1232	ND	10	20	10/11/2022 23:14
Aroclor1242	ND	10	20	10/11/2022 23:14
Aroclor1248	ND	10	20	10/11/2022 23:14
Aroclor1254	ND	10	20	10/11/2022 23:14
Aroclor1260	ND	10	20	10/11/2022 23:14
PCBs, total	ND	10	20	10/11/2022 23:14

Surrogates	REC (%)	Limits	
Decachlorobiphenyl	76	70-130	10/11/2022 23:14
Analyst(s): CK		Analytical Comments: a4,h4	

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
PCB-D-02	2210404-002A	Caulk	10/07/2022	GC22 10112244.D	255729

Analytes	Result	RL	DF	Date Analyzed
Aroclor1016	ND	10	20	10/11/2022 21:53
Aroclor1221	ND	10	20	10/11/2022 21:53
Aroclor1232	ND	10	20	10/11/2022 21:53
Aroclor1242	ND	10	20	10/11/2022 21:53
Aroclor1248	ND	10	20	10/11/2022 21:53
Aroclor1254	ND	10	20	10/11/2022 21:53
Aroclor1260	ND	10	20	10/11/2022 21:53
PCBs, total	ND	10	20	10/11/2022 21:53

Surrogates	REC (%)	Limits	
Decachlorobiphenyl	82	70-130	10/11/2022 21:53
Analyst(s): CK		Analytical Comments: a4,h4	



Quality Control Report

Client: Terracon
Date Prepared: 10/07/2022
Date Analyzed: 10/11/2022
Instrument: GC20, GC40
Matrix: Caulk
Project: NA227079; LUSD Lakewood Elem School Pre-reno
HazMat Survey

WorkOrder: 2210404
BatchID: 255729
Extraction Method: SW3550B/3630C
Analytical Method: SW8082
Unit: mg/kg
Sample ID: MB/LCS/LCSD-255729

QC Summary Report for SW8082 w/ Column Clean-up

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Aroclor1016	ND	0.050	0.050	-	-	-
Aroclor1221	ND	0.050	0.050	-	-	-
Aroclor1232	ND	0.050	0.050	-	-	-
Aroclor1242	ND	0.050	0.050	-	-	-
Aroclor1248	ND	0.050	0.050	-	-	-
Aroclor1254	ND	0.050	0.050	-	-	-
Aroclor1260	ND	0.050	0.050	-	-	-

Surrogate Recovery

Decachlorobiphenyl	0.042			0.05	83	70-130
--------------------	-------	--	--	------	----	--------

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Aroclor1016	0.14	0.14	0.15	94	96	70-130	2.89	20
Aroclor1260	0.14	0.15	0.15	96	101	70-130	5.06	20

Surrogate Recovery

Decachlorobiphenyl	0.047	0.050	0.050	95	101	70-130	6.02	20
--------------------	-------	-------	-------	----	-----	--------	------	----



1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

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☐ CLIP

☐ EDF

CHAIN-OF-CUSTODY RECORD

WorkOrder: 2210404

ClientCode: RGAE

☐ EQUIS

☐ Dry-Weight

☒ Email

☐ HardCopy

☐ ThirdParty

☐ J-flag

☐ Detection Summary

☐ Excel

Report to:

Denise Wallen
Terracon
1220 Concord Avenue, Suite 450
Concord, CA 94520
(510) 547-7771 FAX: (510) 547-1983

Email: Denise.wallen@terracon.com
cc/3rd Party: tony.mikacich@terracon.com;
PO:
Project: NA227079; LUSD Lakewood Elem School
Pre-reno HazMat Survey

Bill to:

Paul King
Terracon
1220 Concord Avenue, Suite 450
Concord, CA 94520
apinvoices@terracon.com

Requested TAT: 5 days;

Date Received: 10/07/2022

Date Logged: 10/07/2022

Lab ID	ClientSampleID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					1	2	3	4	5	6	7	8	9	10	11	12
2210404-001	PCB-D-01	Caulk	10/7/2022 00:00	<input type="checkbox"/>	A	A										
2210404-002	PCB-D-02	Caulk	10/7/2022 00:00	<input type="checkbox"/>	A	A										

Test Legend:

1	8082_PCB_SG_Caulk
5	
9	

2	PRDisposal Fee
6	
10	

3	
7	
11	

4	
8	
12	

Prepared by: Halle Williams

Comments:

NOTE: Soil samples are discarded 60 days after receipt unless other arrangements are made (Water samples are 30 days).
Hazardous samples will be returned to client or disposed of at client expense.



McC Campbell Analytical, Inc.

"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

WORK ORDER SUMMARY

Client Name: TERRACON

Client Contact: Denise Wallen

Contact's Email: Denise.wallen@terracon.com

Project: NA227079; LUSD Lakewood Elem School Pre-reno
HazMat Survey

Comments:

Work Order: 2210404

QC Level: LEVEL 2

Date Logged: 10/7/2022

☐ WaterTrax ☐ WriteOn ☐ EDF ☐ Excel ☐ EQUIS ☒ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

LabID	ClientSampID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	U**	Head Space	Dry- Weight	Collection Date & Time	TAT	Test Due Date	Sediment Content	Hold	Sub Out
001A	PCB-D-01	Caulk	SW8082 (PCBs w/ Column Style Clean-up)	1	Plastic Baggie, Extra Small	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	10/7/2022	5 days	10/17/2022		<input type="checkbox"/>	<input type="checkbox"/>
002A	PCB-D-02	Caulk	SW8082 (PCBs w/ Column Style Clean-up)	1	Plastic Baggie, Extra Small	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	10/7/2022	5 days	10/17/2022		<input type="checkbox"/>	<input type="checkbox"/>

NOTES: * STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).

- Organic extracts are held for 40 days before disposal; Inorganic extract are held for 30 days.

- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.

U** = An unpreserved container was received for a method that suggests a preservation in order to extend hold time for analysis.



E-MAIL REPORT TO:		<input checked="" type="checkbox"/> tony.mikacich@terracon.com Project Manager		PCB Bulk Samples	
		<input checked="" type="checkbox"/> denise.wall@terracon.com Project Assistant		EPA 8082/8082A AROCLORS ONLY	
				Reporting Limit: 50 PPM Minimum	
				McC Campbell TAT: 3-5 days	
Project #:	NA227079	Project Address:	1100 N Ham Lane, Lodi	Sampling Date:	10/05/2022 – 10/07/2022
Project Name:	LUSD Lakewood Elem School Pre-reno HazMat Survey			Sampled By:	J. Alexander & W. Renner
Building Name / Area:		Building D		Page 1 of 1	

PCB-D-01	Material Description: Black building Sealant	
Sample ID	Sample Location & Material Location	Quantity:
PCB-D-01	East exterior	150 in ft
PCB-D-02	Material Description: Black window gasket	
Sample ID	Sample Location & Material Location	Quantity:
PCB-D-02	Diag South exterior window	each sq. ft
	Material Description:	
Sample ID	Sample Location & Material Location	Quantity:
PCB -		
	Material Description:	
Sample ID	Sample Location & Material Location	Quantity:
PCB -		
	Material Description:	
Sample ID	Sample Location & Material Location	Quantity:
PCB -		

Relinquished By:

Wyatt Renner
A. Gutierrez

Signature:

Wyatt Renner
A. Gutierrez

Date/Time:

10/7/22
10/7/2022 1400

Received By:

Signature:

Date/Time:

Relinquished By:

Signature:

Date/Time:

Received By:

Signature:

Date/Time:



Sample Receipt Checklist

Client Name: Terracon
Project: NA227079; LUSD Lakewood Elem School Pre-reno HazMat Survey
WorkOrder No: 2210404 Matrix: Caulk
Carrier: Client Drop-In
Date and Time Received: 10/7/2022 14:00
Date Logged: 10/7/2022
Received by: Agustina Venegas
Logged by: Halle Williams

Chain of Custody (COC) Information

Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample IDs noted by Client on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Date and Time of collection noted by Client on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sampler's name noted on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
COC agrees with Quote?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>

Sample Receipt Information

Custody seals intact on shipping container/cooler?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	NA <input type="checkbox"/>
Custody seals intact on sample bottles?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	NA <input type="checkbox"/>
Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper containers/bottles?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	NA <input type="checkbox"/>
Samples Received on Ice?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	

(Ice Type: WET ICE)

Sample/Temp Blank temperature	Temp: 12.9°C	NA <input type="checkbox"/>
ZHS conditional analyses: VOA meets zero headspace requirement (VOCs, TPHg/BTEX, RSK)?	Yes <input type="checkbox"/> No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>
Sample labels checked for correct preservation?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
pH acceptable upon receipt (Metal: <2; Nitrate 353.2/4500NO3: <2; 522: <4; 218.7: >8)?	Yes <input type="checkbox"/> No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>

UCMR Samples:

pH tested and acceptable upon receipt (200.7: ≤2; 533: 6 - 8; 537.1: 6 - 8)?	Yes <input type="checkbox"/> No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>
Free Chlorine tested and acceptable upon receipt (<0.1mg/L) [not applicable to 200.7]?	Yes <input type="checkbox"/> No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>

Comments:



McC Campbell Analytical, Inc.

"When Quality Counts"

Analytical Report

WorkOrder: 2210432 **Amended:** 12/07/2022

Revision: 1

Report Created for: Terracon

1220 Concord Avenue, Suite 450
Concord, CA 94520

Project Contact: Denise Wallen

Project P.O.:

Project: NA227079; LUSD Lakewood Elem School Pre-reno
HazMat Survey

Project Received: 10/07/2022

Analytical Report reviewed & approved for release on 10/14/2022 by:

Christine Askari
Project Manager

The report shall not be reproduced except in full, without the written approval of the laboratory. The analytical results relate only to the items tested. Results reported conform to the most current NELAP standards, where applicable, unless otherwise stated in a case narrative.





Revision History

Client: Terracon

WorkOrder: 2210432

Project: NA227079; LUSD Lakewood Elem School Pre-reno HazMat Survey

<u>Date</u>	<u>Revision</u>	<u>Reason</u>
12/07/2022	1	Revised to include client requested narrative.



Glossary of Terms & Qualifier Definitions

Client: Terracon

WorkOrder: 2210432

Project: NA227079; LUSD Lakewood Elem School Pre-reno HazMat Survey

Glossary Abbreviation

%D	Serial Dilution Percent Difference
95% Interval	95% Confident Interval
CPT	Consumer Product Testing not NELAP Accredited
DF	Dilution Factor
DI WET	(DISTLC) Waste Extraction Test using DI water
DISS	Dissolved (direct analysis of 0.45 µm filtered and acidified water sample)
DLT	Dilution Test (Serial Dilution)
DUP	Duplicate
EDL	Estimated Detection Limit
ERS	External reference sample. Second source calibration verification.
ITEF	International Toxicity Equivalence Factor
LCS	Laboratory Control Sample
LQL	Lowest Quantitation Level
MB	Method Blank
MB % Rec	% Recovery of Surrogate in Method Blank, if applicable
MDL	MDL is the minimum measured concentration of a substance that can be reported with 99% confidence that the measured concentration is distinguishable from method blank results. Definition and Procedure for the Determination of the Method Detection Limit, Revision 2, 40CFR, Part 136, Appendix B, EPA 821-R-16-006, December 2016.
ML	Minimum Level of Quantitation
MS	Matrix Spike
MSD	Matrix Spike Duplicate
NA	Not Applicable
ND	Not detected at or above the indicated MDL or RL
NR	Data Not Reported due to matrix interference or insufficient sample amount.
PDS	Post Digestion Spike
PDSD	Post Digestion Spike Duplicate
PF	Prep Factor
RD	Relative Difference
RL	Reporting limit is the lowest level that can be reliably determined within specified limits of precision and accuracy during routine laboratory operating conditions. (The RL cannot be lower than the lowest calibration standard used in the initial calibration of the instrument and must be greater than the MDL.)
RPD	Relative Percent Deviation
RRT	Relative Retention Time
SPK Val	Spike Value
SPKRef Val	Spike Reference Value
SPLP	Synthetic Precipitation Leachate Procedure
ST	Sorbent Tube
TCLP	Toxicity Characteristic Leachate Procedure
TEQ	Toxicity Equivalents
TZA	TimeZone Net Adjustment for sample collected outside of MAI's UTC.
WET (STLC)	Waste Extraction Test (Soluble Threshold Limit Concentration)



Glossary of Terms & Qualifier Definitions

Client: Terracon

WorkOrder: 2210432

Project: NA227079; LUSD Lakewood Elem School Pre-reno HazMat Survey

Analytical Qualifiers

S	Surrogate recovery outside accepted recovery limits.
a4	Reporting limits raised due to the sample's matrix prohibiting a full volume extraction.
c1	Surrogate recovery outside of the control limits due to the dilution of the sample.
h4	Sulfuric acid permanganate (EPA 3665) cleanup.
j1	See attached narrative



Case Narrative

Client: Terracon

Work Order: 2210432

Project: NA227079; LUSD Lakewood Elem School Pre-reno HazMat
Survey

December 07, 2022

j1:

SW8082: Polychlorinated Biphenyls (PCBs) Aroclors w/ Column Style Clean-up

Sample 2210432-001A (PCB-E-01) was diluted 5000x due detection of non-target analyte--Aroclor1262--which was detected at 5,310 mg/kg.



Analytical Report

Client: Terracon
Date Received: 10/07/2022 14:00
Date Prepared: 10/07/2022
Project: NA227079; LUSD Lakewood Elem School Pre-reno
HazMat Survey

WorkOrder: 2210432
Extraction Method: SW3550B/3630C
Analytical Method: SW8082
Unit: mg/kg

Polychlorinated Biphenyls (PCBs) Aroclors w/ Column Style Clean-up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
PCB-E-01	2210432-001A	Caulk	10/07/2022	GC22 10132233.D	255729

Analytes	Result	RL	DF	Date Analyzed
Aroclor1016	ND	2500	5,000	10/13/2022 16:12
Aroclor1221	ND	2500	5,000	10/13/2022 16:12
Aroclor1232	ND	2500	5,000	10/13/2022 16:12
Aroclor1242	ND	2500	5,000	10/13/2022 16:12
Aroclor1248	ND	2500	5,000	10/13/2022 16:12
Aroclor1254	ND	2500	5,000	10/13/2022 16:12
Aroclor1260	ND	2500	5,000	10/13/2022 16:12
PCBs, total	ND	2500	5,000	10/13/2022 16:12

Surrogates	REC (%)	Qualifiers	Limits	
Decachlorobiphenyl	2393	S	70-130	10/13/2022 16:12
Analyst(s): CK		Analytical Comments: h4,a4,c1,j1		

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
PCB-E-02	2210432-002A	Caulk	10/07/2022	GC22 10112250.D	255729

Analytes	Result	RL	DF	Date Analyzed
Aroclor1016	ND	10	20	10/11/2022 23:30
Aroclor1221	ND	10	20	10/11/2022 23:30
Aroclor1232	ND	10	20	10/11/2022 23:30
Aroclor1242	ND	10	20	10/11/2022 23:30
Aroclor1248	ND	10	20	10/11/2022 23:30
Aroclor1254	ND	10	20	10/11/2022 23:30
Aroclor1260	ND	10	20	10/11/2022 23:30
PCBs, total	ND	10	20	10/11/2022 23:30

Surrogates	REC (%)	Limits	
Decachlorobiphenyl	80	70-130	10/11/2022 23:30
Analyst(s): CK		Analytical Comments: h4,a4	



Analytical Report

Client: Terracon
Date Received: 10/07/2022 14:00
Date Prepared: 10/07/2022
Project: NA227079; LUSD Lakewood Elem School Pre-reno
HazMat Survey

WorkOrder: 2210432
Extraction Method: SW3550B/3630C
Analytical Method: SW8082
Unit: mg/kg

Polychlorinated Biphenyls (PCBs) Aroclors w/ Column Style Clean-up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
PCB-E-03	2210432-003A	Bulk Material	10/07/2022	GC22 10112247.D	255729

Analytes	Result	RL	DE	Date Analyzed
Aroclor1016	ND	10	20	10/11/2022 22:42
Aroclor1221	ND	10	20	10/11/2022 22:42
Aroclor1232	ND	10	20	10/11/2022 22:42
Aroclor1242	ND	10	20	10/11/2022 22:42
Aroclor1248	ND	10	20	10/11/2022 22:42
Aroclor1254	ND	10	20	10/11/2022 22:42
Aroclor1260	ND	10	20	10/11/2022 22:42
PCBs, total	ND	10	20	10/11/2022 22:42

Surrogates	REC (%)	Limits	
Decachlorobiphenyl	85	70-130	10/11/2022 22:42
Analyst(s): CK		Analytical Comments: h4,a4	



Quality Control Report

Client: Terracon
Date Prepared: 10/07/2022
Date Analyzed: 10/11/2022
Instrument: GC20, GC40
Matrix: Caulk
Project: NA227079; LUSD Lakewood Elem School Pre-reno
HazMat Survey

WorkOrder: 2210432
BatchID: 255729
Extraction Method: SW3550B/3630C
Analytical Method: SW8082
Unit: mg/kg
Sample ID: MB/LCS/LCSD-255729

QC Summary Report for SW8082 w/ Column Clean-up

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Aroclor1016	ND	0.050	0.050	-	-	-
Aroclor1221	ND	0.050	0.050	-	-	-
Aroclor1232	ND	0.050	0.050	-	-	-
Aroclor1242	ND	0.050	0.050	-	-	-
Aroclor1248	ND	0.050	0.050	-	-	-
Aroclor1254	ND	0.050	0.050	-	-	-
Aroclor1260	ND	0.050	0.050	-	-	-

Surrogate Recovery

Decachlorobiphenyl	0.042			0.05	83	70-130
--------------------	-------	--	--	------	----	--------

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Aroclor1016	0.14	0.14	0.15	94	96	70-130	2.89	20
Aroclor1260	0.14	0.15	0.15	96	101	70-130	5.06	20

Surrogate Recovery

Decachlorobiphenyl	0.047	0.050	0.050	95	101	70-130	6.02	20
--------------------	-------	-------	-------	----	-----	--------	------	----



1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 2210432

ClientCode: RGAE

☐ WaterTrax

☐ CLIP

☐ EDF

☐ EQuIS

☐ Dry-Weight

☒ Email

☐ HardCopy

☐ ThirdParty

☐ J-flag

☐ Detection Summary

☐ Excel

Report to:

Denise Wallen
Terracon
1220 Concord Avenue, Suite 450
Concord, CA 94520
(510) 547-7771 FAX: (510) 547-1983

Email: Denise.wallen@terracon.com
cc/3rd Party: tony.mikacich@terracon.com;
PO:
Project: NA227079; LUSD Lakewood Elem School
Pre-reno HazMat Survey

Bill to:

Paul King
Terracon
1220 Concord Avenue, Suite 450
Concord, CA 94520
apinvoices@terracon.com

Requested TAT: 5 days;

Date Received: 10/07/2022

Date Logged: 10/07/2022

Lab ID	ClientSampleID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					1	2	3	4	5	6	7	8	9	10	11	12
2210432-001	PCB-E-01	Caulk	10/7/2022 00:00	<input type="checkbox"/>	A	A										
2210432-002	PCB-E-02	Caulk	10/7/2022 00:00	<input type="checkbox"/>	A	A										
2210432-003	PCB-E-03	Bulk Material	10/7/2022 00:00	<input type="checkbox"/>	A	A										

Test Legend:

1	8082_PCB_SG_Caulk
5	
9	

2	PRDisposal Fee
6	
10	

3	
7	
11	

4	
8	
12	

Prepared by: Halle Williams

Comments:

NOTE: Soil samples are discarded 60 days after receipt unless other arrangements are made (Water samples are 30 days).
Hazardous samples will be returned to client or disposed of at client expense.



WORK ORDER SUMMARY

Client Name: TERRACON
Client Contact: Denise Wallen
Contact's Email: Denise.wallens@terracon.com

Project: NA227079; LUSD Lakewood Elem School Pre-reno
HazMat Survey

Comments:

Work Order: 2210432
QC Level: LEVEL 2
Date Logged: 10/7/2022

☐ WaterTrax ☐ WriteOn ☐ EDF ☐ Excel ☐ EQUIS ☒ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

LabID	ClientSampID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	U**	Head Space	Dry- Weight	Collection Date & Time	TAT	Test Due Date	Sediment Content	Hold	Sub Out
001A	PCB-E-01	Caulk	SW8082 (PCBs w/ Column Style Clean-up)	1	Plastic Baggie, Extra Small	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	10/7/2022	5 days	10/17/2022		<input type="checkbox"/>	<input type="checkbox"/>
002A	PCB-E-02	Caulk	SW8082 (PCBs w/ Column Style Clean-up)	1	Plastic Baggie, Extra Small	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	10/7/2022	5 days	10/17/2022		<input type="checkbox"/>	<input type="checkbox"/>
003A	PCB-E-03	Bulk Material	SW8082 (PCBs w/ Column Style Clean-up)	1	Plastic Baggie, Extra Small	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	10/7/2022	5 days	10/17/2022		<input type="checkbox"/>	<input type="checkbox"/>

NOTES: * STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).

- Organic extracts are held for 40 days before disposal; Inorganic extract are held for 30 days.

- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.

U** = An unpreserved container was received for a method that suggests a preservation in order to extend hold time for analysis.



E-MAIL REPORT TO:		<input checked="" type="checkbox"/> tony.mikacich@terracon.com Project Manager		PCB Bulk Samples	
		<input checked="" type="checkbox"/> denise.wallen@terracon.com Project Assistant		EPA 8082/8082A AROCLORS ONLY	
				Reporting Limit: 50 PPM Minimum	
				McC Campbell TAT: 3-5 days	
Project #:	NA227079	Project Address:	1100 N Ham Lane, Lodi	Sampling Date:	10/05/2022 – 10/07/2022
Project Name:	LUSD Lakewood Elem School Pre-reno HazMat Survey			Sampled By:	J. Alexander & W. Renner
Building Name / Area:		Building E		Page 1 of 1	

PCB-E-01	Material Description: Black Window Gasket	
Sample ID	Sample Location & Material Location	Quantity:
PCB-E-01	South Center Exterior window	375 sq ft
PCB-E-02	Material Description: Black window Sealant	
Sample ID	Sample Location & Material Location	Quantity:
PCB-E-02	SE exterior	200 sq ft
PCB-E-03	Material Description: Gray Vinyl Sheet Flooring Yellow Wainscot Y.M.	
Sample ID	Sample Location & Material Location	Quantity:
PCB-E-03	restroom South west	80 sq ft
	Material Description:	
Sample ID	Sample Location & Material Location	Quantity:
PCB -		
	Material Description:	
Sample ID	Sample Location & Material Location	Quantity:
PCB -		

Relinquished By:	<u>Wyatt Renner</u>	Signature:	<u>[Signature]</u>	Date/Time:	<u>10/7/22</u>
Received By:	<u>Agustina</u>	Signature:	<u>[Signature]</u>	Date/Time:	<u>10/7/2022 1400</u>
Relinquished By:		Signature:		Date/Time:	
Received By:		Signature:		Date/Time:	



Sample Receipt Checklist

Client Name: Terracon
Project: NA227079; LUSD Lakewood Elem School Pre-reno HazMat Survey
WorkOrder No: 2210432 Matrix: Bulk Material/Caulk
Carrier: Client Drop-In
Date and Time Received: 10/7/2022 14:00
Date Logged: 10/7/2022
Received by: Agustina Venegas
Logged by: Halle Williams

Chain of Custody (COC) Information

Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample IDs noted by Client on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Date and Time of collection noted by Client on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sampler's name noted on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
COC agrees with Quote?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>

Sample Receipt Information

Custody seals intact on shipping container/cooler?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	NA <input type="checkbox"/>
Custody seals intact on sample bottles?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	NA <input type="checkbox"/>
Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper containers/bottles?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	NA <input type="checkbox"/>
Samples Received on Ice?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	

(Ice Type: WET ICE)

Sample/Temp Blank temperature	Temp: 12.9°C	NA <input type="checkbox"/>
ZHS conditional analyses: VOA meets zero headspace requirement (VOCs, TPHg/BTEX, RSK)?	Yes <input type="checkbox"/> No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>
Sample labels checked for correct preservation?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
pH acceptable upon receipt (Metal: <2; Nitrate 353.2/4500NO3: <2; 522: <4; 218.7: >8)?	Yes <input type="checkbox"/> No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>

UCMR Samples:

pH tested and acceptable upon receipt (200.7: ≤2; 533: 6 - 8; 537.1: 6 - 8)?	Yes <input type="checkbox"/> No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>
Free Chlorine tested and acceptable upon receipt (<0.1mg/L) [not applicable to 200.7]?	Yes <input type="checkbox"/> No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>

Comments:



McC Campbell Analytical, Inc.

"When Quality Counts"

Analytical Report

WorkOrder: 2210429

Report Created for: Terracon

1220 Concord Avenue, Suite 450
Concord, CA 94520

Project Contact: Denise Wallen

Project P.O.:

Project: NA227079; LUSD Lakewood Elem School Pre-reno
HazMat Survey

Project Received: 10/07/2022

Analytical Report reviewed & approved for release on 10/14/2022 by:

Yen Cao
Project Manager

The report shall not be reproduced except in full, without the written approval of the laboratory. The analytical results relate only to the items tested. Results reported conform to the most current NELAP standards, where applicable, unless otherwise stated in a case narrative.





Glossary of Terms & Qualifier Definitions

Client: Terracon

WorkOrder: 2210429

Project: NA227079; LUSD Lakewood Elem School Pre-reno HazMat Survey

Glossary Abbreviation

%D	Serial Dilution Percent Difference
95% Interval	95% Confident Interval
CPT	Consumer Product Testing not NELAP Accredited
DF	Dilution Factor
DI WET	(DISTLC) Waste Extraction Test using DI water
DISS	Dissolved (direct analysis of 0.45 µm filtered and acidified water sample)
DLT	Dilution Test (Serial Dilution)
DUP	Duplicate
EDL	Estimated Detection Limit
ERS	External reference sample. Second source calibration verification.
ITEF	International Toxicity Equivalence Factor
LCS	Laboratory Control Sample
LQL	Lowest Quantitation Level
MB	Method Blank
MB % Rec	% Recovery of Surrogate in Method Blank, if applicable
MDL	MDL is the minimum measured concentration of a substance that can be reported with 99% confidence that the measured concentration is distinguishable from method blank results. Definition and Procedure for the Determination of the Method Detection Limit, Revision 2, 40CFR, Part 136, Appendix B, EPA 821-R-16-006, December 2016.
ML	Minimum Level of Quantitation
MS	Matrix Spike
MSD	Matrix Spike Duplicate
NA	Not Applicable
ND	Not detected at or above the indicated MDL or RL
NR	Data Not Reported due to matrix interference or insufficient sample amount.
PDS	Post Digestion Spike
PDSD	Post Digestion Spike Duplicate
PF	Prep Factor
RD	Relative Difference
RL	Reporting limit is the lowest level that can be reliably determined within specified limits of precision and accuracy during routine laboratory operating conditions. (The RL cannot be lower than the lowest calibration standard used in the initial calibration of the instrument and must be greater than the MDL.)
RPD	Relative Percent Deviation
RRT	Relative Retention Time
SPK Val	Spike Value
SPKRef Val	Spike Reference Value
SPLP	Synthetic Precipitation Leachate Procedure
ST	Sorbent Tube
TCLP	Toxicity Characteristic Leachate Procedure
TEQ	Toxicity Equivalents
TZA	TimeZone Net Adjustment for sample collected outside of MAI's UTC.
WET (STLC)	Waste Extraction Test (Soluble Threshold Limit Concentration)



Glossary of Terms & Qualifier Definitions

Client: Terracon

WorkOrder: 2210429

Project: NA227079; LUSD Lakewood Elem School Pre-reno HazMat Survey

Analytical Qualifiers

a4	Reporting limits raised due to the sample's matrix prohibiting a full volume extraction.
h4	Sulfuric acid permanganate (EPA 3665) cleanup.



Analytical Report

Client: Terracon
Date Received: 10/07/2022 14:00
Date Prepared: 10/07/2022
Project: NA227079; LUSD Lakewood Elem School Pre-reno
HazMat Survey

WorkOrder: 2210429
Extraction Method: SW3550B/3630C
Analytical Method: SW8082
Unit: mg/kg

Polychlorinated Biphenyls (PCBs) Aroclors w/ Column Style Clean-up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
PCB-S-01	2210429-001A	Caulk	10/07/2022	GC22 10112245.D	255729

Analytes	Result	RL	DF	Date Analyzed
Aroclor1016	ND	10	20	10/11/2022 22:10
Aroclor1221	ND	10	20	10/11/2022 22:10
Aroclor1232	ND	10	20	10/11/2022 22:10
Aroclor1242	ND	10	20	10/11/2022 22:10
Aroclor1248	ND	10	20	10/11/2022 22:10
Aroclor1254	ND	10	20	10/11/2022 22:10
Aroclor1260	ND	10	20	10/11/2022 22:10
PCBs, total	ND	10	20	10/11/2022 22:10

Surrogates	REC (%)	Limits	
Decachlorobiphenyl	86	70-130	10/11/2022 22:10
Analyst(s): CK		Analytical Comments: a4,h4	



Quality Control Report

Client: Terracon
Date Prepared: 10/07/2022
Date Analyzed: 10/11/2022
Instrument: GC20, GC40
Matrix: Caulk
Project: NA227079; LUSD Lakewood Elem School Pre-reno
HazMat Survey

WorkOrder: 2210429
BatchID: 255729
Extraction Method: SW3550B/3630C
Analytical Method: SW8082
Unit: mg/kg
Sample ID: MB/LCS/LCSD-255729

QC Summary Report for SW8082 w/ Column Clean-up

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Aroclor1016	ND	0.050	0.050	-	-	-
Aroclor1221	ND	0.050	0.050	-	-	-
Aroclor1232	ND	0.050	0.050	-	-	-
Aroclor1242	ND	0.050	0.050	-	-	-
Aroclor1248	ND	0.050	0.050	-	-	-
Aroclor1254	ND	0.050	0.050	-	-	-
Aroclor1260	ND	0.050	0.050	-	-	-

Surrogate Recovery

Decachlorobiphenyl	0.042			0.05	83	70-130
--------------------	-------	--	--	------	----	--------

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Aroclor1016	0.14	0.14	0.15	94	96	70-130	2.89	20
Aroclor1260	0.14	0.15	0.15	96	101	70-130	5.06	20

Surrogate Recovery

Decachlorobiphenyl	0.047	0.050	0.050	95	101	70-130	6.02	20
--------------------	-------	-------	-------	----	-----	--------	------	----



1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 2210429

ClientCode: RGAE

☐ WaterTrax

☐ CLIP

☐ EDF

☐ EQuIS

☐ Dry-Weight

☒ Email

☐ HardCopy

☐ ThirdParty

☐ J-flag

☐ Detection Summary

☐ Excel

Report to:

Denise Wallen
Terracon
1220 Concord Avenue, Suite 450
Concord, CA 94520
(510) 547-7771 FAX: (510) 547-1983

Email: Denise.wallen@terracon.com
cc/3rd Party: tony.mikacich@terracon.com;
PO:
Project: NA227079; LUSD Lakewood Elem School
Pre-reno HazMat Survey

Bill to:

Paul King
Terracon
1220 Concord Avenue, Suite 450
Concord, CA 94520
apinvoices@terracon.com

Requested TAT: 5 days;

Date Received: 10/07/2022

Date Logged: 10/07/2022

Lab ID	ClientSampleID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					1	2	3	4	5	6	7	8	9	10	11	12
2210429-001	PCB-S-01	Caulk	10/7/2022 00:00	<input type="checkbox"/>	A	A										

Test Legend:

1	8082_PCB_SG_Caulk
5	
9	

2	PRDisposal Fee
6	
10	

3	
7	
11	

4	
8	
12	

Prepared by: Halle Williams

Comments:

NOTE: Soil samples are discarded 60 days after receipt unless other arrangements are made (Water samples are 30 days).
Hazardous samples will be returned to client or disposed of at client expense.



WORK ORDER SUMMARY

Client Name: TERRACON
Client Contact: Denise Wallen
Contact's Email: Denise.wallens@terracon.com

Project: NA227079; LUSD Lakewood Elem School Pre-reno
HazMat Survey

Comments:

Work Order: 2210429
QC Level: LEVEL 2
Date Logged: 10/7/2022

☐ WaterTrax ☐ WriteOn ☐ EDF ☐ Excel ☐ EQUIS ☒ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

LabID	ClientSampID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	U**	Head Space	Dry- Weight	Collection Date & Time	TAT	Test Due Date	Sediment Content	Hold	Sub Out
001A	PCB-S-01	Caulk	SW8082 (PCBs w/ Column Style Clean-up)	1	Plastic Baggie, Extra Small	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	10/7/2022	5 days	10/17/2022		<input type="checkbox"/>	<input type="checkbox"/>

NOTES: * STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).

- Organic extracts are held for 40 days before disposal; Inorganic extract are held for 30 days.

- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.

U** = An unpreserved container was received for a method that suggests a preservation in order to extend hold time for analysis.



E-MAIL REPORT TO:		<input checked="" type="checkbox"/> tony.mikacich@terracon.com Project Manager		PCB Bulk Samples	
		<input checked="" type="checkbox"/> denise.wallen@terracon.com Project Assistant		EPA 8082/8082A AROCLORS ONLY	
				Reporting Limit: 50 PPM Minimum	
				McC Campbell TAT: 3-5 days	
Project #:	NA227079	Project Address:	1100 N Ham Lane, Lodi	Sampling Date:	10/05/2022 – 10/07/2022
Project Name:	LUSD Lakewood Elem School Pre-reno HazMat Survey			Sampled By:	J. Alexander & W. Renner
Building Name / Area:		Site		Page 1 of 1	

PCB-S-01	Material Description: Expansion Joint	
Sample ID	Sample Location & Material Location	Quantity:
PCB-S-01	Courtyard North Side	20 linear
	Material Description:	
Sample ID	Sample Location & Material Location	Quantity:
PCB -		
	Material Description:	
Sample ID	Sample Location & Material Location	Quantity:
PCB -		
	Material Description:	
Sample ID	Sample Location & Material Location	Quantity:
PCB -		
	Material Description:	
Sample ID	Sample Location & Material Location	Quantity:
PCB -		

Relinquished By:	Wyatt Renner	Signature:		Date/Time:	10/7/22
Received By:	Agustin Ar.	Signature:		Date/Time:	10/7/2022 1400
Relinquished By:		Signature:		Date/Time:	
Received By:		Signature:		Date/Time:	



Sample Receipt Checklist

Client Name: Terracon
Project: NA227079; LUSD Lakewood Elem School Pre-reno HazMat Survey
WorkOrder No: 2210429 Matrix: Caulk
Carrier: Client Drop-In
Date and Time Received: 10/7/2022 14:00
Date Logged: 10/7/2022
Received by: Agustina Venegas
Logged by: Halle Williams

Chain of Custody (COC) Information

Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample IDs noted by Client on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Date and Time of collection noted by Client on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sampler's name noted on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
COC agrees with Quote?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>

Sample Receipt Information

Custody seals intact on shipping container/cooler?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	NA <input type="checkbox"/>
Custody seals intact on sample bottles?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	NA <input type="checkbox"/>
Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper containers/bottles?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	NA <input type="checkbox"/>
Samples Received on Ice?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	

(Ice Type: WET ICE)

Sample/Temp Blank temperature	Temp: 12.9°C	NA <input type="checkbox"/>
ZHS conditional analyses: VOA meets zero headspace requirement (VOCs, TPHg/BTEX, RSK)?	Yes <input type="checkbox"/> No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>
Sample labels checked for correct preservation?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
pH acceptable upon receipt (Metal: <2; Nitrate 353.2/4500NO ₃ : <2; 522: <4; 218.7: >8)?	Yes <input type="checkbox"/> No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>

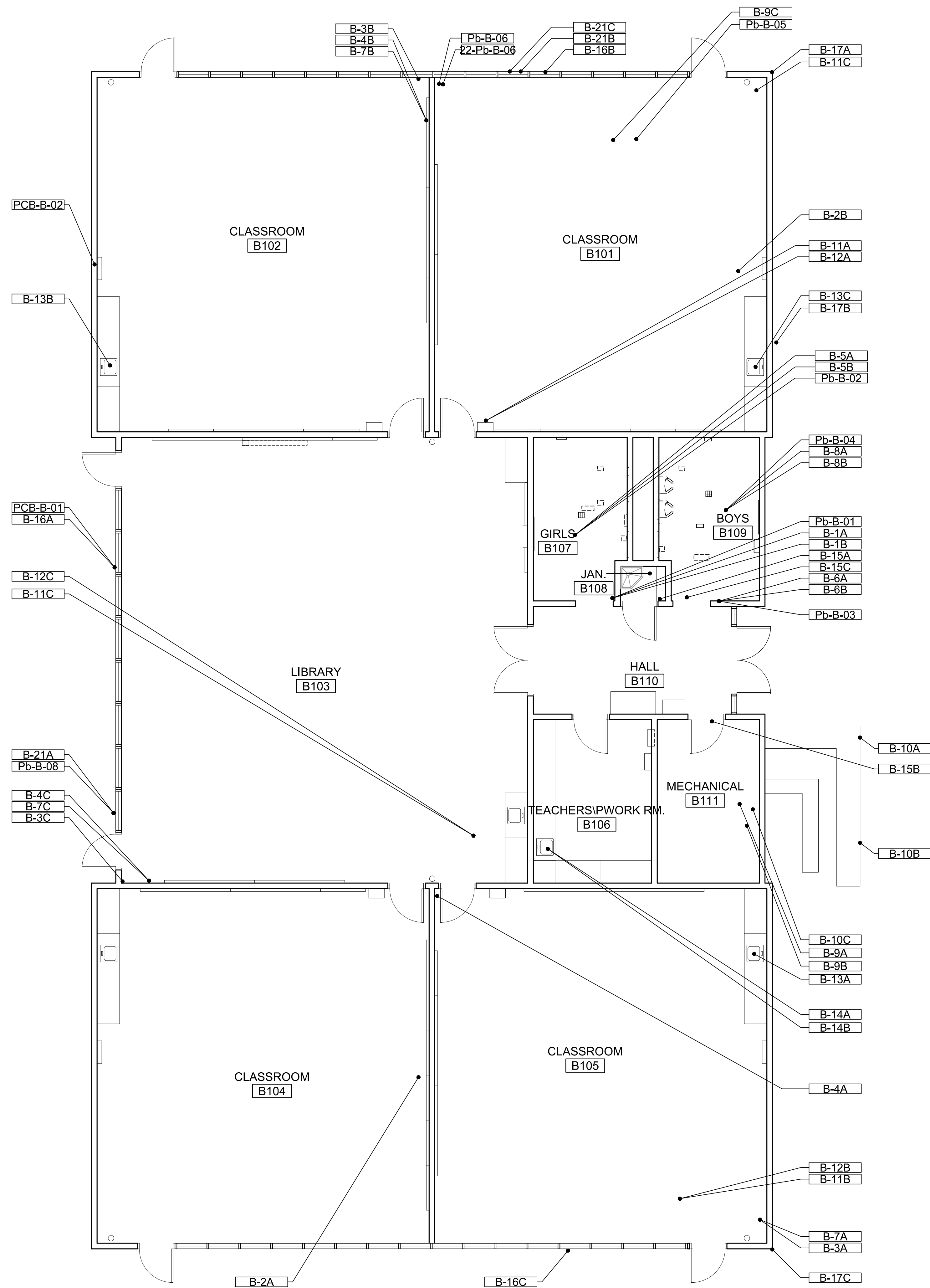
UCMR Samples:

pH tested and acceptable upon receipt (200.7: ≤2; 533: 6 - 8; 537.1: 6 - 8)?	Yes <input type="checkbox"/> No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>
Free Chlorine tested and acceptable upon receipt (<0.1mg/L) [not applicable to 200.7]?	Yes <input type="checkbox"/> No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>

Comments:

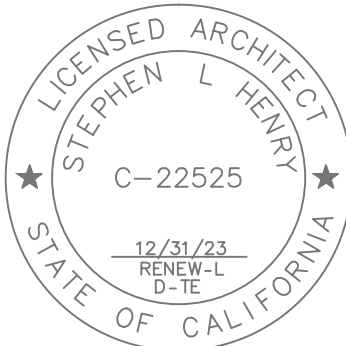
APPENDIX E

SAMPLE LOCATION FIGURES



730 Howe Avenue, Suite 450
Sacramento, CA 95825
Phone: 916.921.2112
Fax: 916.921.2212

Reference: 01/05/2011 No. 177



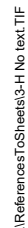
MODERNIZATION LAKEWOOD
ELEMENTARY SCHOOL

SAMPLE LOCATIONS -
BUILDING B

CONSULTANT



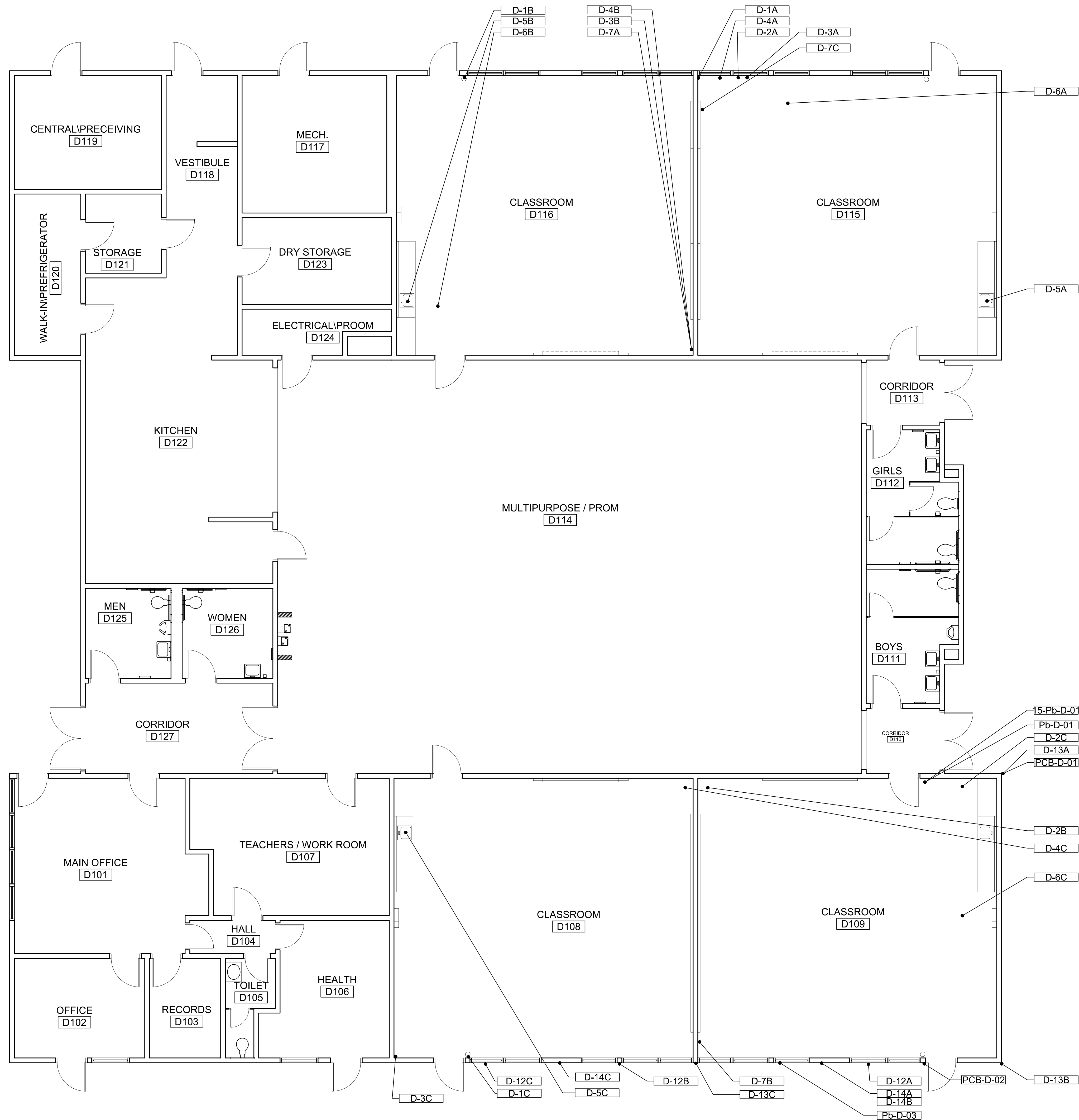
PROJECT NO.	REVISIONS	BY
NA227079		
DATE		
11/18/2022		
DRAWN		
-		
CHECKED		
DLW		
SCALE	3/16"=1'-0"	
CADFILE		
UPDATED		
11/17/2022		
SHEET NO.		



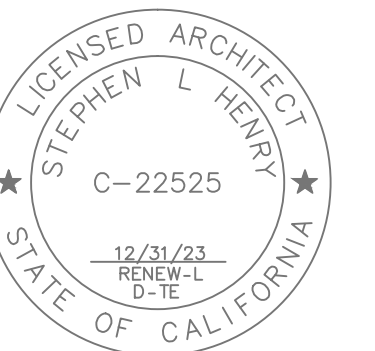
CONSULTANT



PROJECT NO. NA27079	REVISIONS	BY
DATE 11/18/2022		
DRAWN -		
CHECKED DLW		
SCALE 3/16"=1'-0"		
CADFILE		
UPDATED 11/17/2022		



730 Howe Avenue, Suite 450
Sacramento, CA 95825
Phone: 916.921.2112
Fax: 916.921.2212



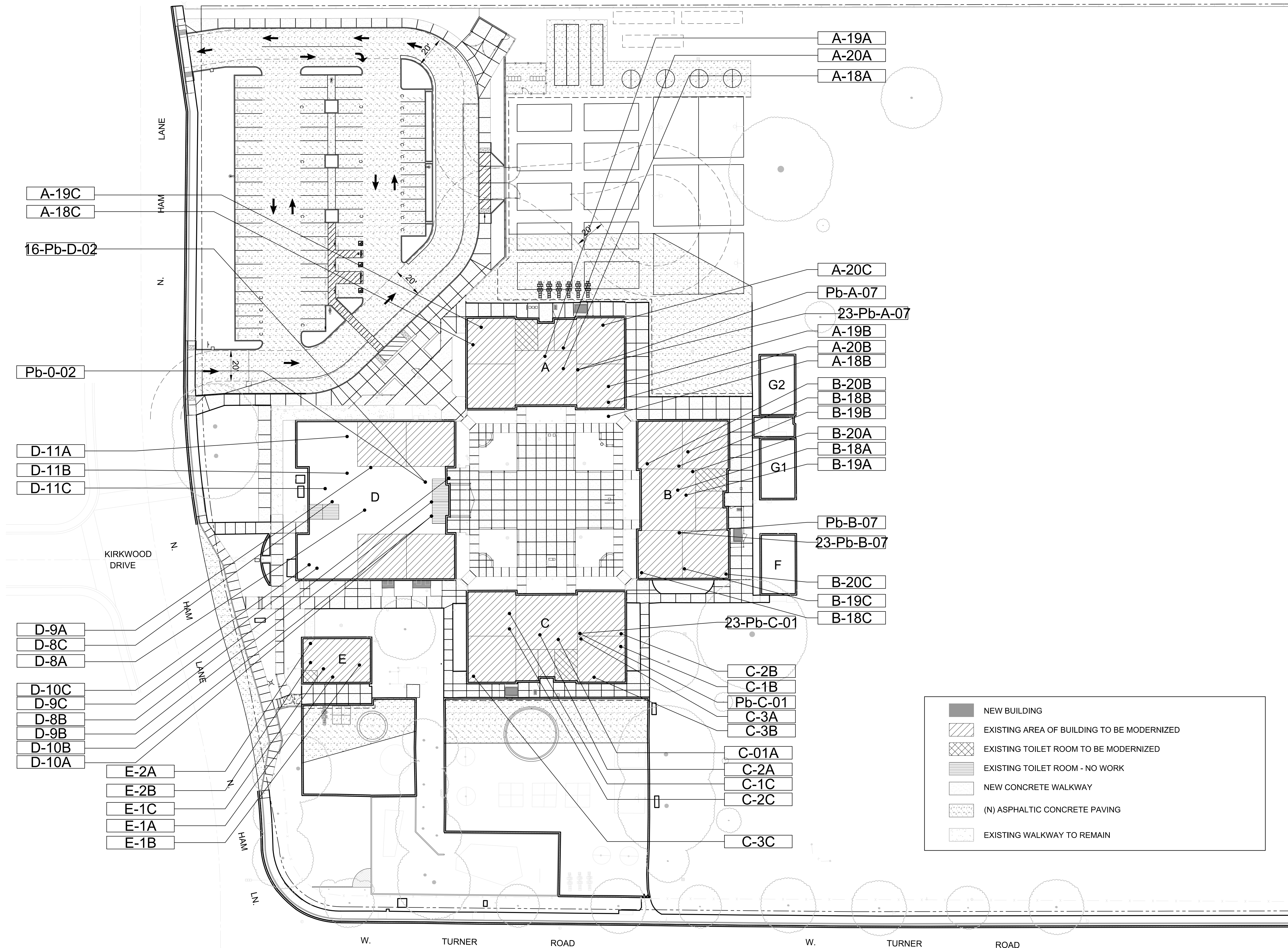
MODERNIZATION LAKEWOOD ELEMENTARY SCHOOL

SAMPLE LOCATIONS - BUILDING D

CONSULTANT



PROJECT NO. NA227079	REVISIONS	BY
DATE 11/18/2022		
DRAWN -		
CHECKED DLW		
SCALE 3/16"=1'-0"		
CADFILE		
UPDATED 11/17/2022		
SHEET NO.		



730 Howe Avenue, Suite 450
Sacramento, CA 95825
Phone: 916.921.2112
Fax: 916.921.2212



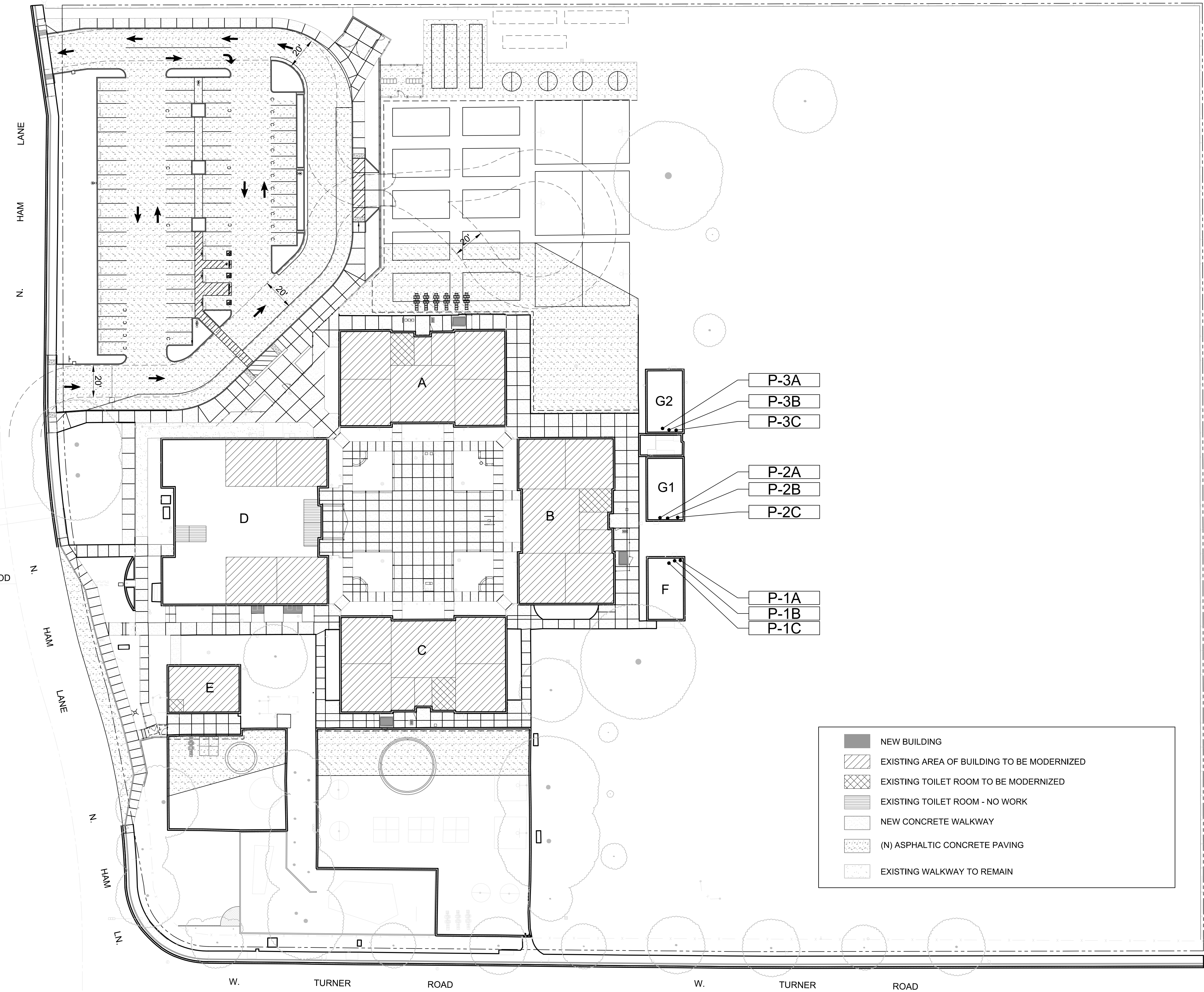
MODERNIZATION LAKEWOOD
ELEMENTARY SCHOOL

SAMPLE LOCATIONS - ROOF

CONSULTANT



PROJECT NO.	REVISIONS	BY
NA227079		
DATE		
11/18/2022		
DRAWN		
CHECKED		
DLW		
SCALE	1/32"=1'-0"	
CADFILE		
UPDATED		
11/17/2022		
SHEET NO.		



730 Howe Avenue, Suite 450
Sacramento, CA 95825
Phone: 916.921.2112
Fax: 916.921.2212

Reference: 08/08/2014 No. 107



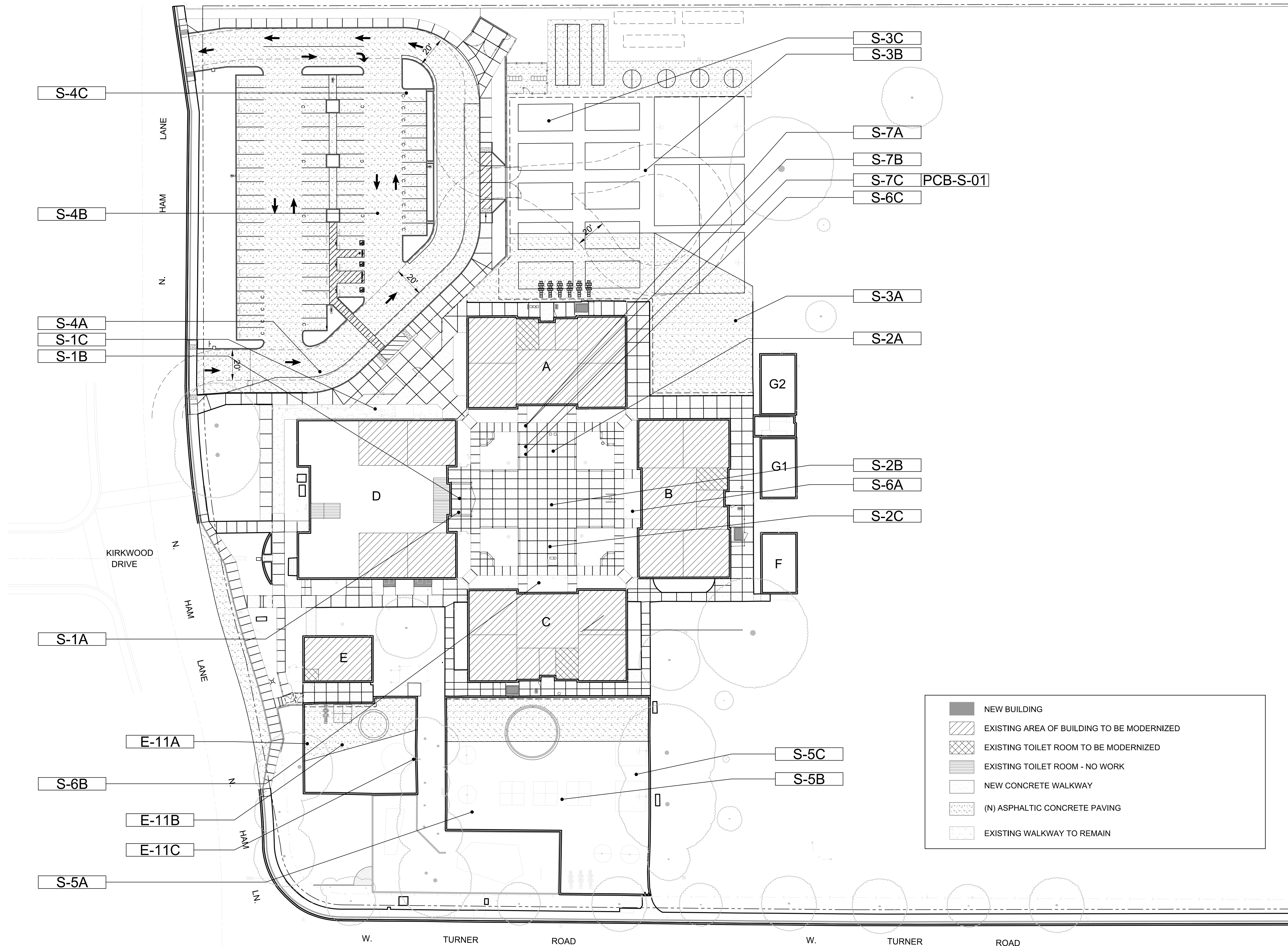
MODERNIZATION LAKEWOOD
ELEMENTARY SCHOOL

SAMPLE LOCATIONS -
PORTABLE ROOF

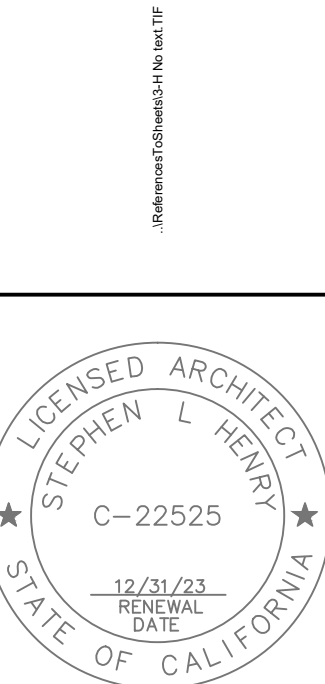
CONSULTANT



PROJECT NO.	REVISIONS	BY
NA227079		
DATE		
11/18/2022		
DRAWN		
CHECKED		
DLW		
SCALE	1/32"=1'-0"	
CADFILE		
UPDATED		
11/17/2022		
SHEET NO.		



730 Howe Avenue, Suite 450
Sacramento, CA 95825
Phone: 916.921.2112
Fax: 916.921.2212



MODERNIZATION LAKEWOOD
ELEMENTARY SCHOOL

SAMPLE LOCATIONS - SITE

CONSULTANT



PROJECT NO.	REVISIONS	BY
NA227079		
DATE		
11/18/2022		
DRAWN		
DLW		
CHECKED		
DLW		
SCALE	1/32"=1'-0"	
CADFILE		
UPDATED		
11/17/2022		
SHEET NO.		

APPENDIX E

CERTIFICATIONS

State of California
Division of Occupational Safety and Health
Certified Asbestos Consultant

John W Alexander

Name

Certification No. **07-4296**

Expires on **02/21/23**

This certification was issued by the Division of Occupational Safety and Health as authorized by Sections 7180 et seq. of the Business and Professions Code.





STATE OF CALIFORNIA
DEPARTMENT OF PUBLIC HEALTH



LEAD-RELATED CONSTRUCTION CERTIFICATE

INDIVIDUAL:



John Alexander

CERTIFICATE TYPE:

Lead Inspector/Assessor

Lead Project Monitor

NUMBER:

LRC-00004446

LRC-00004445

EXPIRATION DATE:

2/18/2023

2/18/2023

Disclaimer: This document alone should not be relied upon to confirm certification status. Compare the individual's photo and name to another valid form of government issued photo identification. Verify the individual's certification status by searching for Lead-Related Construction Professionals at www.cdph.ca.gov/programs/clppb or calling (800) 597-LEAD

State of California
Division of Occupational Safety and Health
Certified Site Surveillance Technician

Wyatt B Renner

Name

Certification No. 15-5504

Expires on 10/14/23



This certification was issued by the Division of
Occupational Safety and Health as authorized by
Sections 7180 et seq. of the Business and
Professions Code.



STATE OF CALIFORNIA
DEPARTMENT OF PUBLIC HEALTH



LEAD-RELATED CONSTRUCTION CERTIFICATE

INDIVIDUAL:



Wyatt Renner

CERTIFICATE TYPE:

Lead Sampling Technician

NUMBER:

LRC-00002620

EXPIRATION DATE:

10/4/2023

Disclaimer: This document alone should not be relied upon to confirm certification status. Compare the individual's photo and name to another valid form of government issued photo identification. Verify the individual's certification status by searching for Lead-Related Construction Professionals at www.cdph.ca.gov/programs/clppb or calling (800) 597-LEAD

SECTION 07 31 01 – ASPHALT SHINGLE ROOFING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes asphalt shingle roofing and related work as shown and specified.
- B. Removal and disposal of roofing system, insulation, flashings, scuppers, and associated debris for a complete prepared roof surface.
- C. Install specified underlayment per manufacturer's instructions.
- D. Install specified asphalt shingles per manufacturer's instructions.
- E. Install new 4" x 4" galvanized drip edge.
- F. Install specified low profile dormer vents per manufacturer's instructions.
- G. Related Sections include the following:
 - 1. Section 01 – See Section 01 11 00 Summary of Work for a detailed description
 - 2. Section 07 – Rough Carpentry
 - 3. Section 07 – Modified Bitumen Roofing
 - 4. Section 07 – Sheet Metal Flashing and Trim

1.3 DEFINITIONS

- A. Roofing Terminology: Refer to ASTM D 1079 and glossary of NRCA's "The NRCA Roofing and Waterproofing Manual" for definitions of terms related to roofing work in this Section.

1.4 SUBMITTALS

- A. Product Data: For each type of product indicated.

- B. Samples for Initial Selection: For each type of asphalt shingle, ridge and hip cap shingles ridge vent and exposed valley lining indicated.
 - 1. Include similar Samples of trim and accessories involving color selection.
- C. Samples for Verification: For the following products, of sizes indicated, to verify color selected.
 - 1. Asphalt Shingle: Full-size asphalt shingle strip.
 - 2. Ridge and Hip Cap Shingles: Full-size ridge and hip cap asphalt shingle.
 - 3. Ridge Vent: 12-inch- (300-mm-) long Sample.
 - 4. Exposed Valley Lining: 12 inches (300 mm) square.
 - 5. Self-Adhering Underlayment: 12 inches (300 mm) square.
- D. Qualification Data: For Installer, including certificate signed by asphalt shingle manufacturer stating that Installer is approved, authorized, or licensed to install roofing system indicated.
- E. Product Test Reports: Based on evaluation of comprehensive tests performed by a qualified testing agency or by manufacturer and witnessed by a qualified testing agency, for asphalt shingles.
- F. Maintenance Data: For asphalt shingles to include in maintenance manuals.
- G. Warranties: Special warranties specified in this Section.

1.5 **QUALITY ASSURANCE**

- A. Source Limitations: Obtain specified products as required from warranting manufacturer as outlined in the specifications.
- B. Fire-Test-Response Characteristics: Provide asphalt shingle and related roofing materials with the fire-test-response characteristics indicated, as determined by testing identical products per test method below by UL or another testing and inspecting agency acceptable to authorities having jurisdiction. Identify materials with appropriate markings of applicable testing and inspecting agency.
 - 1. Exterior Fire-Test Exposure: Class A; ASTM E 108 or UL 790, for application and roof slopes indicated.
- C. Pre-installation Conference: Conduct conference at Project site to comply with requirements in Division 1 Section "Project Management and Coordination."
- D. **MANUFACTURER'S INSPECTIONS**
 - A. When the project is in progress, the manufacturer will provide the following:
 - 1. Keep the Owner informed as to the progress and quality of the work as observed.
 - 2. Provide job site inspections two (2) days per week during installation.

3. Report to the Owner in writing any failure or refusal of the Contractor to correct unacceptable practices called to the Contractor's attention.
4. Confirm after completion that manufacturer has observed no applications procedures in conflict with the specifications other than those that may have been previously reported and corrected.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Store roofing materials in a dry, well-ventilated, weather-tight location according to asphalt shingle manufacturer's written instructions. Store underlayment rolls on end on pallets or other raised surfaces. Do not double-stack rolls.
 1. Handle, store, and place roofing materials in a manner to avoid significant or permanent damage to roof deck or structural supporting members.
- B. Protect unused underlayment from weather, sunlight, and moisture when left overnight or when roofing work is not in progress.

1.7 PROJECT CONDITIONS

- A. Weather Limitations: Proceed with installation only when existing and forecasted weather conditions permit asphalt shingle roofing to be performed according to manufacturer's written instructions and warranty requirements.
 1. Install self-adhering sheet underlayment within the range of ambient and substrate temperatures recommended by manufacturer.

1.8 WARRANTY

- A. Material Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace asphalt shingles that fail in materials or workmanship within specified warranty period. Materials failures include manufacturing defects and failure of asphalt shingles to self-seal after a reasonable time.
 1. Material Warranty Period: Lifetime Ltd. Transferable
 2. Wind-Speed Warranty Period: Asphalt shingles will resist blow-off or damage caused by wind speeds up to 130 mph.
 3. Algae-Discoloration Warranty
- B. Installer Warranty: Roofing Installer's warranty, on warranty form at end of this Section, signed by roofing Installer, covering Work of this Section, in which roofing Installer agrees to repair or replace components of asphalt shingle roofing that fail in materials or workmanship within the following warranty period:
 1. Warranty Period: Two (2) years from date of Substantial Completion.

1.9 **EXTRA MATERIALS**

- A. Furnish extra materials described below that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.

1. Asphalt Shingles: 100 sq. ft of each type, in unbroken bundles.

PART 2 - PRODUCTS

2.1 **MANUFACTURERS**

- A. In other Part 2 articles where titles below introduce lists, the following requirements apply to product selection:

1. Available Products: Subject to compliance with requirements, products that may be incorporated into the Work include, but are not limited to, products specified.

2.2 **GLASS-FIBER-REINFORCED ASPHALT SHINGLES**

- A. Laminated-Strip Asphalt Shingles: ASTM D 3462, laminated, multi-ply overlay construction, glass-fiber reinforced, mineral-granule surfaced, and self-sealing. Shingle Products listed below are the basis of design.

1. Available Shingle Products:
 - a. GAF Timerline Ultra HD.
 - b. Malarkey Roofing Detail Legacy
 - c. Owens Corning Trudefinition duration designer
2. Butt Edge: Straight cut
3. Strip Size: Manufacturer's standard
4. Algae Resistance: StainGuard algae discoloration ltd. Warranty
5. Color and Blends: To be determined

- B. Hip and Ridge Shingles: Manufacturer's standard units to match asphalt shingles.

2.3 **UNDERLAYMENT MATERIALS**

- A. Self-Adhering Sheet Underlayment, Granular Surfaced: ASTM D 1970, minimum of 60-mil-thick sheet; glass-fiber-mat-reinforced, SBS-modified asphalt; mineral-granule surfaced; with release paper backing; cold applied. Provide primer for adjoining concrete or masonry surfaces to receive underlayment.

1. Manufacturers listed below were used as the basis of design. Equal products are acceptable:
 - a. The Garland Company, Inc. – HPR Aqua Shield.

b. Tremco

2.4 VENTS

- A. Vent: Manufacturer's standard low profile dormer vent.
 - 1. Available Products:
 - a. O'HAGIN MFG., tapered low profile attic vent or equal.

2.5 ACCESSORIES

- A. Asphalt Roofing Cement: ASTM D 4586, Type II, asbestos free.
- B. Roofing Nails: ASTM F 1667; aluminum, stainless-steel, copper, or hot-dip galvanized steel wire shingle nails, minimum 0.120-inch- (3-mm-) diameter, barbed shank, sharp-pointed, with a minimum 3/8-inch- (9.5-mm-) diameter flat head and of sufficient length to penetrate 3/4 inch (19 mm) into solid wood decking or extend at least 1/8 inch (3 mm) through OSB or plywood sheathing.
 - 1. Where nails are in contact with metal flashing, use nails made from same metal as flashing.
- C. Underlayment Nails: Aluminum, stainless-steel with low profile capped heads or disc caps, 1-inch (25-mm) minimum diameter.

2.6 METAL FLASHING AND TRIM

- A. Sheet Metal Flashing and Trim: Comply with requirements in Division 7 Section "Sheet Metal Flashing and Trim."
 - 1. Sheet Metal:
- B. Fabricate sheet metal flashing and trim to comply with recommendations in SMACNA's "Architectural Sheet Metal Manual" that apply to design, dimensions, metal, and other characteristics of item.
 - 1. Step Flashings: Fabricate with a headlap of 2 inches (50 mm) and a minimum extension of 5 inches (125 mm) over the underlying asphalt shingle and up the vertical surface.
 - 2. Cricket Flashings: Fabricate with concealed flange extending a minimum 24 inches (600 mm) beneath upslope asphalt shingles and 6 inches (150 mm) above the roof plane.
 - 3. Open Valley Flashings: Fabricate in lengths not exceeding [10 feet (3 m)] with 1-inch- (25-mm-) high inverted-V profile at center of valley and equal flange widths of 10 inches (250 mm).

4. Drip Edges: Fabricate in lengths not exceeding [10 feet (3 m)] with 2-inch (50-mm) roof deck flange and 1-1/2-inch (38-mm) fascia flange with 3/8-inch (9.6-mm) drip at lower edge.
- C. Vent Pipe Flashings: ASTM B 749, Type L51121, at least 1/16 inch (1.6 mm) thick. Provide lead sleeve sized to slip over and turn down into pipe, soldered to skirt at slope of roof and extending at least 4 inches (100 mm) from pipe onto roof.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of work.
1. Examine roof sheathing to verify that sheathing joints are supported by framing and blocking or metal clips and that installation is within flatness tolerances.
 2. Verify that substrate is sound, dry, smooth, clean, sloped for drainage, and completely anchored; and that provision has been made for flashings and penetrations through asphalt shingles.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 UNDERLAYMENT INSTALLATION

- A. Self-Adhering Sheet Underlayment: Install self-adhering sheet underlayment, wrinkle free, on roof deck. Comply with low-temperature installation restrictions of underlayment manufacturer if applicable. Install over the entire roof area, lapped in direction to shed water. Lap sides not less than 3-1/2 inches (89 mm). Lap ends not less than 6 inches (150 mm) staggered 24 inches (600 mm) between courses. Roll laps with roller. Cover underlayment within seven days.
1. Prime concrete and masonry surfaces to receive self-adhering sheet underlayment.
 2. Eaves: Extend from edges of eaves 36 inches beyond interior face of exterior wall.
 3. Rakes: Extend from edges of rake 36 inches beyond interior face of exterior wall.
 4. Valleys: Extend from lowest to highest point 18 inches on each side.
 5. Hips: Extend 18 inches on each side.
 6. Ridges: Extend 36 inches on each side.
 7. Sidewalls: Extend beyond sidewall 18 inches and return vertically against sidewall not less than 4 inches
 8. Dormers, Chimneys, Skylights, and other Roof-Penetrating Elements: Extend beyond penetrating element 18 inches and return vertically against penetrating element not less than 4 inches.

9. Roof Slope Transitions: Extend 18 inches on each roof slope.
- B. Metal-Flashed Open Valley Underlayment: Install one layers of 36-inchwide self-adhering underlayment centered in valley. Stagger end laps between layers at least 72 inches. Lap ends of each layer at least 12 inches in direction to shed water, and seal with asphalt roofing cement. Fasten each layer to roof deck with roofing nails.
 1. Lap roof deck felt underlayment over first layer of valley felt underlayment at least 6 inches.

3.3 METAL FLASHING INSTALLATION

- A. General: Install metal flashings and other sheet metal to comply with requirements in Division 7 Section "Sheet Metal Flashing and Trim."
 1. Install metal flashings according to recommendations in ARMA's "Residential Asphalt Roofing Manual" and asphalt shingle recommendations in NRCA's "The NRCA Roofing and Waterproofing Manual."
- B. Apron Flashings: Extend lower flange over and beyond each side of downslope asphalt shingles and up the vertical surface.
- C. Step Flashings: Install with a headlap of 2 inches and extend over the underlying asphalt shingle and up the vertical surface. Fasten to roof deck only.
- D. Cricket Flashings: Install against the roof-penetrating element extending concealed flange beneath upslope asphalt shingles and beyond each side.
- E. Open Valley Flashings: Install centrally in valleys, lapping ends at least 8 inches in direction to shed water. Fasten upper end of each length to roof deck beneath overlap.
 1. Secure hemmed flange edges into metal cleats spaced 2 inches apart and fastened to roof deck.
- F. Rake Drip Edges: Install rake drip edge flashings over underlayment and fasten to roof deck.
- G. Eave Drip Edges: Install eave drip edge flashings below underlayment and fasten to roof sheathing.
- H. Pipe Flashings: Form flashing around pipe penetrations and asphalt shingles. Fasten and seal to asphalt shingles as recommended by manufacturer.

3.4 ASPHALT SHINGLE INSTALLATION

- A. Install asphalt shingles according to manufacturer's written instructions, recommendations in ARMA's "Residential Asphalt Roofing Manual," and asphalt shingle recommendations in NRCA's "The NRCA Roofing and Waterproofing Manual."
- B. Install starter strip along lowest roof edge, consisting of an asphalt shingle strip with tabs removed with self-sealing strip face up at roof edge.
 - 1. Extend asphalt shingles 1/2 inch over fascia at eaves and rakes.
 - 2. Install starter strip along rake edge.
- C. Install first and remaining courses of asphalt shingles stair-stepping diagonally across roof deck with manufacturer's recommended offset pattern at succeeding courses, maintaining uniform exposure.
- D. Fasten asphalt shingle strips with a minimum of five roofing nails located according to manufacturer's written instructions.
 - 1. When ambient temperature during installation is below 50 deg F, seal asphalt shingles with asphalt roofing cement spots.
- E. Closed-Cut Valleys: Extend asphalt shingle strips from one side of valley 12 inches beyond center of valley. Use one-piece shingle strips without joints in the valley. Fasten with extra nail in upper end of shingle. Install asphalt shingle courses from other side of valley and cut back to a straight line 2 inches short of valley centerline. Trim upper concealed corners of cut-back shingle strips.
 - 1. Do not nail asphalt shingles within 6 inches of valley center.
 - 2. Set trimmed, concealed-corner asphalt shingles in a 3-inch-wide bed of asphalt roofing cement.
- F. Vents: Install vents over within the asphalt shingle roofing system according to manufacturer's written instructions. Fasten with roofing nails of sufficient length to penetrate sheathing. Install vents at the eave and ridge as needed to promote proper air flow and meet the current building code in regards to attic venting.
- G. Ridge and Hip Cap Shingles: Maintain same exposure of cap shingles as roofing shingle exposure. Lap cap shingles at ridges to shed water away from direction of prevailing winds. Fasten with roofing nails of sufficient length to penetrate sheathing.

END OF SECTION

SECTION 07 62 00 SHEET METAL FLASHING AND TRIM

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes:
 - 1. Manufactured through-wall flashing with counterflashing
 - 2. Formed low-slope roof sheet metal fabrications.
 - 3. Formed wall, coping, and soffit sheet metal fabrications.
 - 4. Formed equipment support flashing
 - 5. Surface mounted counter flashing
 - 6. Manufactured reglets and counter flashing
 - 7. Gutters & Downspouts
- B. Related Requirements:
 - 1. Division 06 "Rough Carpentry" for wood nailers, curbs, and blocking.
 - 2. Division 07 "Membrane Roofing" for materials and installation of sheet metal flashing and trim integral with roofing.
 - 3. Division 07 "Metal Roofing" for materials and installation of sheet metal flashing and trim integral with roofing.
 - 4. Division 07 "Roof Accessories" for set-on-type curbs, equipment supports, roof hatches, vents, and other manufactured roof accessory units.

1.3 COORDINATION

- A. Coordinate sheet metal flashing and trim layout and seams with sizes and locations of penetrations to be flashed, and joints and seams in adjacent materials.
- B. Coordinate sheet metal flashing and trim installation with adjoining roofing and wall materials, joints, and seams to provide leak proof, secure, and noncorrosive installation.

1.4 PREINSTALLATION MEETINGS

- A. Pre Installation Conference: Conduct conference at Project site.
 - 1. Review construction schedule. Verify availability of materials, Installer's personnel, equipment, and facilities needed to make progress and avoid delays.
 - 2. Review special roof details, roof drainage, roof-penetration flashing, equipment curbs, and condition of other construction that affect sheet metal flashing and trim.
 - 3. Review requirements for insurance and certificates if applicable.
 - 4. Review sheet metal flashing observation and repair procedures after flashing installation.

1.5 SUBMITTALS

- A. Product Data: For each type of product.
 - 1. Include construction details, material descriptions, dimensions of individual components and profiles, and finishes for each manufactured product and accessory.
- B. Shop Drawings: For sheet metal flashing and trim.
 - 1. Include plans, elevations, sections, and attachment details.
 - 2. Detail fabrication and installation layouts, expansion-joint locations, and keyed details. Distinguish between shop- and field-assembled work.
 - 3. Include identification of material, thickness, weight, and finish for each item and location in Project.
 - 4. Include details for forming, including profiles, shapes, seams, and dimensions.
 - 5. Include details for joining, supporting, and securing, including layout and spacing of fasteners, cleats, clips, and other attachments. Include pattern of seams.
 - 6. Include details of termination points and assemblies.
 - 7. Include details of expansion joints and expansion-joint covers, including showing direction of expansion and contraction from fixed points.
 - 8. Include details of roof-penetration flashing.
 - 9. Include details of edge conditions, including eaves, ridges, valleys, rakes, crickets, and counter flashings as applicable.
 - 10. Include details of special conditions.
 - 11. Include details of connections to adjoining work.
 - 12. Detail formed flashing and trim at scale of not less than 3 inches per 12 inches
- C. Samples for Initial Selection: For each type of sheet metal and accessory indicated with factory-applied finishes.

- D. Samples for Verification: For each type of exposed finish.
 - 1. Sheet Metal Flashing: 12 inches (300 mm) long by actual width of unit, including finished seam and in required profile. Include fasteners, cleats, clips, closures, and other attachments.
 - 2. Trim, Metal Closures, Expansion Joints, Joint Intersections, and Miscellaneous Fabrications: 12 inches (300 mm) long and in required profile. Include fasteners and other exposed accessories.

1.6 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For fabricator.
- B. Product Certificates: For each type of coping and roof edge flashing that is SPRI ES-1 tested.
- C. Product Test Reports: For each product, for tests performed by a qualified testing agency.
- D. Sample Warranty: For special warranty.

1.7 CLOSEOUT SUBMITTALS

- A. Maintenance Data: For sheet metal flashing and trim, and its accessories, to include in maintenance manuals.

1.8 QUALITY ASSURANCE

- A. Fabricator Qualifications: Employs skilled workers who custom fabricate sheet metal flashing and trim similar to that required for this Project and whose products have a record of successful in-service performance.
 - 1. For copings and roof edge flashings that are SPRI ES-1 tested, shop shall be listed as able to fabricate required details as tested and approved.

1.9 DELIVERY, STORAGE, AND HANDLING

- A. Do not store sheet metal flashing and trim materials in contact with other materials that might cause staining, denting, or other surface damage. Store sheet metal flashing and trim materials away from uncured concrete and masonry.
- B. Protect strippable protective covering on sheet metal flashing and trim from exposure to sunlight and high humidity, except to extent necessary for period of sheet metal flashing and trim installation.

1.10 WARRANTY

- A. Special Warranty on Finishes: Manufacturer agrees to repair finish or replace sheet metal flashing and trim that shows evidence of deterioration of factory-applied finishes within specified warranty period.
 - 1. Exposed Panel Finish: Deterioration includes, but is not limited to, the following:
 - a. Color fading more than 5 Hunter units when tested according to ASTM D 2244.
 - b. Chalking in excess of a No. 8 rating when tested according to ASTM D 4214.
 - c. Cracking, checking, peeling, or failure of paint to adhere to bare metal.
 - 2. Finish Warranty Period: **20** years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

- A. General: Sheet metal flashing and trim assemblies shall withstand wind loads, structural movement, thermally induced movement, and exposure to weather without failure due to defective manufacture, fabrication, installation, or other defects in construction. Completed sheet metal flashing and trim shall not rattle, leak, or loosen, and shall remain watertight.
- B. Sheet Metal Standard for Flashing and Trim: Comply with NRCA's "The NRCA Roofing Manual" and SMACNA's "Architectural Sheet Metal Manual" requirements for dimensions and profiles shown unless more stringent requirements are indicated.
- C. Sheet Metal Standard for Copper: Comply with CDA's "Copper in Architecture Handbook." Conform to dimensions and profiles shown unless more stringent requirements are indicated.
- D. SPRI Wind Design Standard: Manufacture and install roof edge flashings tested according to SPRI ES-1 and capable of resisting the following design pressure:
 - 1. Design Pressure: As indicated on Drawings.
- E. Thermal Movements: Allow for thermal movements from ambient and surface temperature changes to prevent buckling, opening of joints, overstressing of components, failure of joint sealants, failure of connections, and other detrimental

effects. Base calculations on surface temperatures of materials due to both solar heat gain and nighttime-sky heat loss.

1. Temperature Change: 120 deg F (67 deg C), ambient; 180 deg F (100 deg C), material surfaces.

2.2 SHEET METALS

- A. General: Protect mechanical and other finishes on exposed surfaces from damage by applying strippable, temporary protective film before shipping.
- B. Metallic-Coated Steel Sheet: Provide zinc-coated (galvanized) steel sheet according to ASTM A 653/A 653M, G90 (Z275) coating designation; prepainted by coil-coating process to comply with ASTM A 755/A 755M.
 1. Surface: Smooth, flat and with manufacturer's standard clear acrylic coating on both sides.
 2. Exposed Coil-Coated Finish:
 - a. Two-Coat Fluoropolymer: AAMA 621. Fluoropolymer finish containing not less than 70 percent PVDF resin by weight in both color coat and clear topcoat. Prepare, pretreat, and apply coating to exposed metal surfaces to comply with coating and resin manufacturers' written instructions.
 3. Color: Match Architect's sample
 4. Concealed Finish: Pretreat with manufacturer's standard white or light-colored acrylic or polyester backer finish, consisting of prime coat and wash coat with minimum total dry film thickness of 0.5 mil (0.013 mm).

2.3 UNDERLAYMENT MATERIALS

- A. Self-Adhering, High-Temperature Sheet: Minimum 45 mils thick, consisting of a slip-resistant polyethylene- or polypropylene-film top surface laminated to a layer of butyl- or SBS-modified asphalt adhesive, with release-paper backing; specifically designed to withstand high metal temperatures beneath metal roofing. Provide primer according to written recommendations of underlayment manufacturer.
 1. The Garland Company Inc., 3800 E. 91st Street Cleveland OH 44105; R-Mer Seal self-adhering underlayment or equal.
 2. Thermal Stability: ASTM D 1970; stable after testing at 240 deg F or higher.
 3. Low-Temperature Flexibility: ASTM D 1970; passes after testing at minus 20 deg F or lower.
- B. Slip Sheet: Rosin-sized building paper, 3 lb/100 sq. ft. minimum.

2.4 MISCELLANEOUS MATERIALS

- A. General: Provide materials and types of fasteners, solder, protective coatings, sealants, and other miscellaneous items as required for complete sheet metal flashing and trim installation and as recommended by manufacturer of primary sheet metal unless otherwise indicated.
- B. Fasteners: Wood screws, annular threaded nails, self-tapping screws, self-locking rivets and bolts, and other suitable fasteners designed to withstand design loads and recommended by manufacturer of primary sheet metal or manufactured item.
 - 1. General: Blind fasteners or self-drilling screws, gasketed, with hex-washer head.
 - a. Exposed Fasteners: Heads matching color of sheet metal using plastic caps or factory-applied coating. Provide metal-backed EPDM or PVC sealing washers under heads of exposed fasteners bearing on weather side of metal.
 - b. Blind Fasteners: High-strength aluminum or stainless-steel rivets suitable for metal being fastened.
 - c. Spikes and Ferrules: Same material as gutter; with spike with ferrule matching internal gutter width.
 - 2. Fasteners for Zinc-Tin Alloy-Coated Stainless-Steel Sheet: Series 300 stainless steel.
- C. Solder:
 - 1. For Zinc-Coated (Galvanized) Steel: ASTM B 32, Grade Sn50, 50 percent tin and 50 percent lead or Grade Sn60, 60 percent tin and 40 percent lead with maximum lead content of 0.2 percent.
- D. Sealant Tape: Pressure-sensitive, 100 percent solids, polyisobutylene compound sealant tape with release-paper backing. Provide permanently elastic, nonsag, nontoxic, nonstaining tape 1/2 inch wide and 1/8 inch thick.
- E. Elastomeric Sealant: ASTM C 920, elastomeric polyurethane polymer sealant; of type, grade, class, and use classifications required to seal joints in sheet metal flashing and trim and remain watertight.
- F. Butyl Sealant: ASTM C 1311, single-component, solvent-release butyl rubber sealant; polyisobutylene plasticized; heavy bodied for hooked-type expansion joints with limited movement.
- G. Bituminous Coating: Cold-applied asphalt emulsion according to ASTM D 1187.
- H. Asphalt Roofing Cement: ASTM D 4586, asbestos free, of consistency required for application.

2.5 FABRICATION, GENERAL

- A. General: Custom fabricate sheet metal flashing and trim to comply with details shown and recommendations in cited sheet metal standard that apply to design, dimensions, geometry, metal thickness, and other characteristics of item required. Fabricate sheet metal flashing and trim in shop to greatest extent possible.
 - 1. Fabricate sheet metal flashing and trim in thickness or weight needed to comply with performance requirements, but not less than that specified for each application and metal.
 - 2. Obtain field measurements for accurate fit before shop fabrication.
 - 3. Form sheet metal flashing and trim to fit substrates without excessive oil canning, buckling, and tool marks; true to line, levels, and slopes; and with exposed edges folded back to form hems.
 - 4. Conceal fasteners and expansion provisions where possible. Do not use exposed fasteners on faces exposed to view.
- B. Fabrication Tolerances: Fabricate sheet metal flashing and trim that is capable of installation to a tolerance of 1/4 inch in 20 feet on slope and location lines indicated on Drawings and within 1/8-inch offset of adjoining faces and of alignment of matching profiles.
- C. Expansion Provisions: Form metal for thermal expansion of exposed flashing and trim.
 - 1. Form expansion joints of intermeshing hooked flanges, not less than 1 inch deep, filled with butyl sealant concealed within joints.
 - 2. Use lapped expansion joints only where indicated on Drawings.
- D. Sealant Joints: Where movable, nonexpansion-type joints are required, form metal to provide for proper installation of elastomeric sealant according to cited sheet metal standard.
- E. Fabricate cleats and attachment devices from same material as accessory being anchored or from compatible, noncorrosive metal.
- F. Seams: Fabricate nonmoving seams with flat-lock seams. Form seams and seal with elastomeric sealant unless otherwise recommended by sealant manufacturer for intended use.
- G. Do not use graphite pencils to mark metal surfaces.

2.6 ROOF-DRAINAGE SHEET METAL FABRICATIONS

- A. Hanging Gutters: Fabricate to cross section required, complete with end pieces, outlet tubes, and other accessories as required. Fabricate in minimum 96-inch-long sections. Furnish flat-stock gutter brackets and flat-stock gutter spacers and

straps fabricated from same metal as gutters, of size recommended by cited sheet metal standard but with thickness not less than dimension indicated on Drawings. Fabricate expansion joints, expansion-joint covers, gutter bead reinforcing bars, and gutter accessories from same metal as gutters. Shop fabricate interior and exterior corners.

1. Gutter Profile: Style B according to cited sheet metal standard.
 2. Expansion Joints: Butt type with cover plate.
 3. Accessories: Continuous, removable leaf screen with sheet metal frame and hardware cloth screen.
 4. Gutters with Girth up to 15 Inches: Fabricate from the following materials:
 - a. Galvanized Steel: 22 gauge thickness.
- B. Downspouts: Fabricate downspouts per plans and details or per size per CA plumbing code. Fabricate from the following materials unless otherwise shown on drawings.
1. Galvanized Steel: 22 gauge thickness.
- C. Conductor Heads: Fabricate conductor heads with flanged back and stiffened top edge and of dimensions and shape required, complete with outlet tubes, exterior flange trim, and built-in overflows. Fabricate from the following materials:
1. Galvanized Steel: 22 gauge thickness.

2.7 WALL SHEET METAL FABRICATIONS

- A. Through-Wall Flashing: Fabricate continuous flashings in minimum 96-inch-long, but not exceeding 12-foot long, sections, under copings, and at shelf angles. Fabricate discontinuous lintel, sill, and similar flashings to extend 6 inches beyond each side of wall openings; and form with 2-inch high, end dams. Fabricate from the following materials:
1. Galvanized Steel: 22 gauge thickness.
- B. Opening Flashings in Frame Construction: Fabricate head, sill, jamb, and similar flashings to extend **4 inches** beyond wall openings. Form head and sill flashing with 2-inch high, end dams. Fabricate from the following materials:
1. Galvanized Steel: 22 gauge thickness.
- C. Wall Expansion-Joint Cover: Fabricate from the following materials:
1. Galvanized Steel: 22 gauge thickness.

2.8 MISCELLANEOUS SHEET METAL FABRICATIONS

- A. Equipment Support Flashing: Fabricate from the following materials:
 - 1. Galvanized Steel: 22 gauge thickness.
- B. Overhead-Piping Safety Pans: Fabricate from the following materials:
 - 1. Galvanized Steel: 22 gauge thickness.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements for installation tolerances, substrate, and other conditions affecting performance of the Work.
 - 1. Verify compliance with requirements for installation tolerances of substrates.
 - 2. Verify that substrate is sound, dry, smooth, clean, sloped for drainage, and securely anchored.
 - 3. Verify that air- or water-resistant barriers have been installed over sheathing or backing substrate to prevent air infiltration or water penetration.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 UNDERLAYMENT INSTALLATION

- A. Self-Adhering Sheet Underlayment: Install self-adhering sheet underlayment, wrinkle free. Prime substrate if recommended by underlayment manufacturer. Comply with temperature restrictions of underlayment manufacturer for installation; use primer for installing underlayment at low temperatures. Apply in shingle fashion to shed water, with end laps of not less than 6 inches staggered 24 inches between courses. Overlap side edges not less than 3-1/2 inches. Roll laps and edges with roller. Cover underlayment within 14 days.
- B. Apply slip sheet, wrinkle free, directly on substrate before installing sheet metal flashing and trim.

3.3 INSTALLATION, GENERAL

- A. General: Anchor sheet metal flashing and trim and other components of the Work securely in place, with provisions for thermal and structural movement. Use

fasteners, solder, protective coatings, separators, sealants, and other miscellaneous items as required to complete sheet metal flashing and trim system.

1. Install sheet metal flashing and trim true to line, levels, and slopes. Provide uniform, neat seams with minimum exposure of solder, welds, and sealant.
 2. Install sheet metal flashing and trim to fit substrates and to result in watertight performance. Verify shapes and dimensions of surfaces to be covered before fabricating sheet metal.
 3. Space cleats not more than 12 inches apart. Attach each cleat with at least two fasteners. Bend tabs over fasteners.
 4. Install exposed sheet metal flashing and trim with limited oil canning, and free of buckling and tool marks.
 5. Torch cutting of sheet metal flashing and trim is not permitted.
 6. Do not use graphite pencils to mark metal surfaces.
- B. Metal Protection: Where dissimilar metals contact each other, or where metal contacts pressure-treated wood or other corrosive substrates, protect against galvanic action or corrosion by painting contact surfaces with bituminous coating or by other permanent separation as recommended by sheet metal manufacturer or cited sheet metal standard.
1. Coat concealed side of stainless-steel sheet metal flashing and trim with bituminous coating where flashing and trim contact wood, ferrous metal, or cementitious construction.
 2. Underlayment: Where installing sheet metal flashing and trim directly on cementitious or wood substrates, install underlayment and cover with slip sheet.
- C. Expansion Provisions: Provide for thermal expansion of exposed flashing and trim. Space movement joints at maximum of **10 feet** with no joints within 24 inches of corner or intersection.
1. Form expansion joints of intermeshing hooked flanges, not less than 1 inch deep, filled with sealant concealed within joints.
 2. Use lapped expansion joints only where indicated on Drawings.
- D. Fasteners: Use fastener sizes that penetrate wood blocking or sheathing not less than 1-1/4 inches for nails and not less than 3/4 inch for wood screws.
- E. Conceal fasteners and expansion provisions where possible in exposed work and locate to minimize possibility of leakage. Cover and seal fasteners and anchors as required for a tight installation.
- F. Seal joints as required for watertight construction.
1. Use sealant-filled joints unless otherwise indicated. Embed hooked flanges of joint members not less than 1 inch into sealant. Form joints to completely conceal sealant. When ambient temperature at time of installation is

between 40 and 70 deg F, set joint members for 50 percent movement each way. Adjust setting proportionately for installation at higher ambient temperatures. Do not install sealant-type joints at temperatures below 40 deg F.

2. Prepare joints and apply sealants to comply with requirements in Section 079200 "Joint Sealants."
- G. Soldered Joints: Clean surfaces to be soldered, removing oils and foreign matter. Pre-tin edges of sheets with solder to width of 1-1/2 inches; however, reduce pre-tinning where pre-tinned surface would show in completed Work.
1. Do not solder metallic-coated steel sheet.
 2. Do not pre-tin zinc-tin alloy-coated stainless steel.
 3. Do not use torches for soldering.
 4. Heat surfaces to receive solder, and flow solder into joint. Fill joint completely. Completely remove flux and spatter from exposed surfaces.
 5. Stainless-Steel Soldering: Tin edges of uncoated sheets, using solder for stainless steel and acid flux. Promptly remove acid flux residue from metal after tinning and soldering. Comply with solder manufacturer's recommended methods for cleaning and neutralization.
 6. Copper Soldering: Tin edges of uncoated sheets, using solder for copper.
 7. Copper-Clad Stainless-Steel Soldering: Tin edges of uncoated sheets, using solder for copper-clad stainless steel.
- H. Rivets: Rivet joints in zinc where necessary for strength.

3.4 ROOF-DRAINAGE SYSTEM INSTALLATION

- A. General: Install sheet metal roof-drainage items to produce complete roof-drainage system according to cited sheet metal standard unless otherwise indicated. Coordinate installation of roof perimeter flashing with installation of roof-drainage system.
- B. Hanging Gutters: Join sections with riveted and soldered joints or joints sealed with sealant as shown and specified on drawings or summary/scope of work. Provide for thermal expansion. Attach gutters at eave or fascia to firmly anchor them in position. Provide end closures and seal watertight with sealant. Slope to downspouts.
1. Fasten gutter spacers to front and back of gutter.
 2. Anchor and loosely lock back edge of gutter to continuous cleat, eave or apron flashing.
 3. Anchor back of gutter that extends onto roof deck with cleats spaced not more than 24 inches apart.
 4. Anchor gutter with gutter brackets and straps spaced not more than 24 inches apart to roof deck, unless otherwise indicated, and loosely lock to front gutter bead.

5. Anchor gutter with spikes and ferrules spaced not more than 24 inches apart.
 6. Install gutter with expansion joints at locations indicated, but not exceeding, 50 feet apart. Install expansion-joint caps.
 7. Install continuous gutter screens on gutters with noncorrosive fasteners, removable for cleaning gutters.
- C. Conductor Heads: Anchor securely to wall, with elevation of conductor head rim at minimum of 1 inch below gutter discharge.
- D. Expansion-Joint Covers: Install expansion-joint covers at locations and of configuration indicated. Lap joints minimum of 4 inches in direction of water flow.

3.5 ROOF FLASHING INSTALLATION

- A. General: Install sheet metal flashing and trim to comply with performance requirements, sheet metal manufacturer's written installation instructions, and cited sheet metal standard. Provide concealed fasteners where possible, and set units true to line, levels, and slopes. Install work with laps, joints, and seams that are permanently watertight and weather resistant.
- B. Roof Edge Flashing: Anchor to resist uplift and outward forces according to recommendations in FM Global Property Loss Prevention Data Sheet 1-49 for FM Approvals' listing for required windstorm classification.
- C. Copings: Anchor to resist uplift and outward forces according to recommendations in cited sheet metal standard unless otherwise indicated.
1. Interlock exterior bottom edge of coping with continuous cleat anchored to substrate at 24-inch centers.
 2. Anchor interior leg of coping with washers and screw fasteners through slotted holes at 24-inch centers.
- D. Copings: Anchor to resist uplift and outward forces according to recommendations in FM Global Property Loss Prevention Data Sheet 1-49 for specified FM Approvals' listing for required windstorm classification.
- E. Pipe or Post Counterflashing: Install counterflashing umbrella with close-fitting collar with top edge flared for elastomeric sealant, extending minimum of 4 inches over base flashing. Install stainless-steel draw band and tighten.
- F. Counterflashing: Coordinate installation of counterflashing with installation of base flashing. Insert counterflashing in reglets or receivers and fit tightly to base flashing. Extend counterflashing 4 inches over base flashing. Lap counterflashing joints minimum of 4 inches. Secure in waterproof manner by means of

interlocking folded seam or blind rivets and sealant, anchor and washer at 36-inch centers unless otherwise indicated.

- G. Roof-Penetration Flashing: Coordinate installation of roof-penetration flashing with installation of roofing and other items penetrating roof. Seal with elastomeric sealant and clamp flashing to pipes that penetrate roof.

3.6 WALL FLASHING INSTALLATION

- A. General: Install sheet metal wall flashing to intercept and exclude penetrating moisture according to cited sheet metal standard unless otherwise indicated. Coordinate installation of wall flashing with installation of wall-opening components such as windows, doors, and louvers.
- B. Through-Wall Flashing: Installation of through-wall flashing is specified in Section 042000 "Unit Masonry."Section092400 "Cement Plastering."
- C. Opening Flashings in Frame Construction: Install continuous head, sill, jamb, and similar flashings to extend 4 inches beyond wall openings.

3.7 MISCELLANEOUS FLASHING INSTALLATION

- A. Equipment Support Flashing: Coordinate installation of equipment support flashing with installation of roofing and equipment. Weld or seal flashing with elastomeric sealant to equipment support member.
- B. Overhead-Piping Safety Pans: Suspend pans from structure above, independent of other overhead items such as equipment, piping, and conduit, unless otherwise indicated on Drawings. Pipe and install drain line to plumbing waste or drainage system.

3.8 ERECTION TOLERANCES

- A. Installation Tolerances: Shim and align sheet metal flashing and trim within installed tolerance of 1/4 inch in 20 feet on slope and location lines indicated on Drawings and within 1/8-inch offset of adjoining faces and of alignment of matching profiles.
- B. Installation Tolerances: Shim and align sheet metal flashing and trim within installed tolerances specified in MCA's "Guide Specification for Residential Metal Roofing."

3.9 CLEANING AND PROTECTION

- A. Clean exposed metal surfaces of substances that interfere with uniform oxidation and weathering.
- B. Clean and neutralize flux materials. Clean off excess solder.
- C. Clean off excess sealants.
- D. Remove temporary protective coverings and strippable films as sheet metal flashing and trim are installed unless otherwise indicated in manufacturer's written installation instructions. On completion of sheet metal flashing and trim installation, remove unused materials and clean finished surfaces as recommended by sheet metal flashing and trim manufacturer. Maintain sheet metal flashing and trim in clean condition during construction.
- E. Replace sheet metal flashing and trim that have been damaged or that have deteriorated beyond successful repair by finish touchup or similar minor repair procedures.

END OF SECTION 07 62 00